THE TIMES
Higher Education
SUPPLEMENT

Angry exchange over MPs' right to know

by John O'Leary

A further clash took place this week over MPs' rights to know civil servants' advice to the Secretary of State for Education, Mr. Mark Carlisle.

The exchange took place in the select committee on education which has already produced an interim report complaining of obstructions to its inquiries.

Mr Carlisle intervened when Mr Christopher Price, chairman of the committee, asked Ms Sheila Browne, HM Senior Chief Inspector, what advice had been given on the closure of the Centre for Educational Disadvantage in Manchester.

The Secretary of State said he did not wish to cover up any area but thought civil servants' advice to ministers was not subject to select committee scrutiny. Mr Price insisted that there was no agreement between Parliament and the Government and threatened to produce a second report on the subject.

Ms Browne was not obliged to reply, but he reserved his right to ask her any questions. When pressed for an answer, she said she could not reveal the advice.

Answering further questions on the centre's impending closure, Mr Carlisle said it had not fulfilled its early expectations. Despite the best efforts of those involved, it had not had sufficient effect to justify continuation.

In the last year, the centre had received fewer than two inquiries a day, the majority from students and mostly on the role of the centre. Fewer than one inquiry per week had been received from local education authorities, he said.

On the question of the shortage of teachers in mathematics and the *physical sciences, a paper from the* Department of Education and Science revealed that the number of vacancies in each subject had continued to rise in the past year in spite of government retraining schemes. The number of vacancies in 1980 for teachers of mathematics had risen to 599 from 466 in the previous year and in the physical sciences the 1980 figure was 597, compared with 417 in 1979.

Some 25,000 teachers who were qualified in mathematics, physics and chemistry, were now teaching other subjects, and 17,000 were teaching in those subjects without qualifications. In physics, this represented 18 per cent of the total teaching force, and for mathematics 16 per cent.

Mr Carlisle said there were various options being considered by the department to remedy the situation. In the paper, more vigorous recruitment, and a guarantee of teaching posts for suitably qualified people was considered one of the possible moves to be made.

The selection committee is meeting next week to finalize its report.

Dyer inquiry faces Flowers backlash

by Ngaio Crequer

The cloud of doubt hanging over the future of the Flowers report on London medical education may delay the work of the sister committee on non-medical organization and has led to speculation about the latter's usefulness.

The committee on academic organization at London University, chaired by Sir Peter Swinnerton-Dyer, which is searching for substantial economies, next meets in *September and will decide whether* to issue an interim report.

So far the bulk of replies, about 150, have been returned to the committee in response to questionnaires and letters of inquiry about present teaching and research capabilities, future goals and problems of resources.

But some respondents have said they need extra time or will need to revise their opinions depending on what happens to the Flowers recommendations.

The Flowers report, which recommended radical restructuring of London's medical schools, has met vociferous opposition and decisions on its future have been shelved at *least until the autumn and it is* unlikely that the main recommendations will be implemented.

The Swinnerton-Dyer committee faces a much more daunting task than Flowers because it extends into every aspect of work at London.

In the light of what has happened to Flowers, many lecturers in some Principals are persisting questioning whether the inquiry is not a waste of time and money, as it would be expected to meet even stronger resistance to proposed substantial changes.

An added problem is that some schools, in their written evidence to the committee, have already pointed out the strength of their institutions and the value of individual departments. They have put no hostages to fortune.

The committee has been invited to make its final report by the end of next year.

Porridge, reputedly the staple diet of prisoners in the Soviet Union, is ladled out on the steps of the Foreign and Commonwealth Office in Whitehall to highlight the plight of Jewish students detained in the USSR. Members of the "Competing for Freedom" campaign sponsored by the Union of Jewish Students and the Student and Academic Campaign for Soviet Jewry are seen above with MP Tim Sainsbury (second from right).

Art graduates lose right to 'second mile'

by Olga Wojtas
Scottish Correspondent

Scottish art colleges are concerned that their best students will now have to decide between postgraduate work and teacher training, as the Scottish Education Department has decided it will no longer give grants for both.

The department decision came to light through its written response of grant applications submitted by art graduates and diplomates. Until now, it has given grants for a one-year postgraduate diploma at the Central Art Institutions, followed by a grant either for a college of education course or the three year postgraduate course at London's Royal College.

In a letter to Mr Gavin Jantzen, principal of Edinburgh College of Art, the department says its funding of postgraduate awards has been a matter of going the second mile.

"It is inevitable in the present economic climate to look at possible savings in public expenditure, but equally inevitable that those who are in which the department has exercised its discretion particularly generously should come under the closest scrutiny," it says.

Following a letter from Mr Jantzen, the department has agreed it may be wrong to make the change without transitional arrangements for those who have made plans in good faith on the basis of the old rules and will give further grants to students finishing postgraduate courses in session 1979-80.

"This is a diminution of opportunity," said Principal Ross. "With teacher training, it's surely in the best interests to take the best students, and the best taking the one-year postgraduate course.

"The very best go on to the Royal College in London and students will not now have the benefit of the postgraduate year to develop their portfolios up to a more competitive standard. As principal of the college, what particularly disturbs me is that if students are going to the Royal College, we will now no longer have the benefit of them for their postgraduate year."

University lecturers move to break up pay deadlock

University lecturers are holding a special meeting today to discuss a proposal to call in the Government's arbitration services to break the deadlock over their 19 per cent pay claim.

Although the claim, which is within Government cash limits, was agreed by parties representing the lecturers and the universities more than two months ago, there is still no date set for the second tier of negotiations on which the Government is represented.

The executive committee of the Association of University Teachers will decide today whether to ask the Advisory, Conciliation and Advisory Service, ACAS, to intervene. If agreed ACAS could seek a meeting of the Department of Education and Science and other parties to try to discover the reasons for the delay.

Lecturers are still pinning their hopes on a statement made in the House of Lords by Baroness Young, education minister of state, that the Government expected a meeting to be held by the end of this month. Accusations as to which Government department is *responsible* for the delay continue to abound. The Treasury this week insisted it was them.

Informed sources say that the Prime Minister, Mrs Margaret Thatcher, is unhappy with the claim, particularly in the light of her success in keeping down MPs' rises and instances that public sector and local government employees' wages should be held back.

The actual claim is an average 13 per cent on top of the flat rate lecturers have been receiving since April on account of Clegg. The DES has received more than 500 letters on the claim. About 50 MPs attended a lobby held by the AUT last week.

Scots staff go to arbitration

The staff side of the Scottish teachers salaries committee, the negotiating body for school and further education staff, has been forced to arbitration over its pay dispute by management.

At the latest STSC meeting, *management submitted to the chairman*, Lord Robertson, that all other means of negotiation had failed. Evidence will now be heard by the Arbitration, Conciliation and Advisory Service on July 31.

Scotland's largest teaching union, the Educational Institute of Scotland, voted last month to reject arbitration and continue industrial action next term. Management hope the ACAS conclusion will forestall any action when the schools resume at the end of August.

The management's final offer in June was 14 per cent, taking into account the "Clegg error" but staff have now raised their claim from 18.6 per cent to 21.2 per cent because of inflation.

NELP fishes around for volunteers

by Paul Flather

All 62 compulsory redundancies projected as North East London Polytechnic could have be avoided if a "trawl" to find staff willing to accept compensation for premature retirement and options for retraining prove successful by the end of the year.

At a meeting this week of the joint staff body representing the three local education committees of three London boroughs and the unions, it was revealed that the "trawl" would take place even though final agreement on a premature retirement compensation scheme would not be feasible until October.

Redundancy notices, due to be sent out on August 31, those have now been postponed pending the outcome of the "trawl" and options for retraining and redeployment, to be discussed at special meeting of the joint two body in September, have been discussed.

Mike Dated Weitzel, national negotiating secretary of the National Association of Teachers in Further and Higher Education, said the meeting had been positive and hard hitting.

"There is now a hope that there will be a sufficient number of voluntary changes to avoid all redundancies. We certainly see this as a step in the right direction, although it should have come much earlier," he said.

Letters will be sent out to all staff before the start of the next academic year outlining the options available under the scheme. Both sides are now working on the assumption that the scheme will be ratified without objections in October.

Nothe has also requested financial details of the running of NELP.

A request for a plan to reduce the number of faculties at the polytechnic from eight to six to be deferred was rejected.

The director of the Huddersfield Polytechnic, Mr Kenneth Cummins, has warned that there would have to be drastic changes in the work of the college unless Kirklees Council came forward with more money.

The local authority has so far contributed £500,000 to the college, about £1m less than the amount that requested. Existing money will run out by December, he has warned.

"There is a real danger that the scope and nature of the institution will change drastically so that it remains a polytechnic only in name if funds are not made available," a polytechnic spokesman said this week.

Kirklees Council are demanding changes in the running of the polytechnic, after allegations of maladministration made in an audit report published at the beginning of the year, before they consider extra funds.

Dr Boyson, higher education under secretary, has told local education authorities that the government is extremely reluctant to compensate LEAs whose polytechnics were worst hit by the capping of the pool cash limits this year.

Dr Boyson said he wanted to consult with all interested parties before drawing up new methods of polytechnic funding for 1980-81. He has invited local authorities to be ready to discuss their courses prematurely because of the new policy.

OU delay decision

Staff at the Open University have won the first skirmish in their battle to block the appointment of Salford University's registrar as the OU's new secretary.

Decision on the appointment is now to be delayed until the autumn after an agreement by the OU council to refer the matter back to the selection committee.

The controversy over Mr R. S. Blaworth's appointment stems originally from concern by staff that he comes from the same institution as Professor John Horlock, vice-chancellor of Salford, who is to be the OU's new vice-chancellor.

NEXT WEEK

Michael Biddiss on Spengler
Profile of Richard Cobb
Roger Sharrock on Literature Against Itself
The values of failure
War studies offensive
Commonwealth conference : Colombo

DES forecast

continued from page 1

If the local authority side's pessimism is vindicated, the report says, the extra £16m of fee income will be lost to polytechnics and colleges next year.

The report also discloses that local education authorities are expecting a large number of students to default on their fee payments on give up their courses prematurely because of the new policy.

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Three-way split among MPs delays committee report

by John O'Leary

A radical package of proposals including the abolition of the University Grants Committee and the submission of the universities to local authority influence, was submitted to the Select Committee on Education this week.

The proposals, which would give predominance to local decision making throughout higher education, are understood to form the basis of a minority report by two left wing members of the committee, Mr Dafydd Thomas (Plaid Cymru) and Mr Stan Thorne (Labour).

But progress towards agreement on an official report has been delayed by a three-way split in the committee, which has put back voting by more than a month. Publication of the report on higher education will now be delayed until the end of October.

Conservative members insisted on the postponement of the voting sessions planned for this week after Mr Christopher Price, the chairman, had tabled a revised draft of more than 100 pages. They are not satisfied that it accurately represents the consensus views reached at a weekend meeting of members last month.

They will submit amendments when the committee reconvenes next month, having decided against holding the final sessions next week.

Mr Price's draft is expected to be critical of the performance of the Department of Education and Science and to recommend the establishment of a national body, to be known as the Committee for Colleges and Polytechnics (CCP), to oversee higher education in the public sector. It would work closely *with the University Grants Committee* and share a joint secretariat independent of the DES to co-ordinate planning.

In the reformed structure, the DES would concentrate on keeping the UGC and CCP informed of Government priorities and funding targets, issuing up-to-date statistics and providing funds for new initiatives. Its role in course approvals would disappear, and intervention would take place only in exceptional circumstances.

The draft is understood to propose the abolition of the regional advisory councils and the removal of responsibility for higher education *courses from HM Inspectors.* Manpower planning and the DES concept of a "broad steer" will not win support.

It will recommend greater autonomy for institutions, subject to the acceptance by the appropriate national body of a statement of activities and objectives by each university, polytechnic and college. This information would be made available to the public and meetings of both national bodies would also be open.

The minority report, which represents a comprehensive alternative rather than a series of amendments, takes a radically different approach. By giving the local authorities influence, though not outright control, over universities, the two MPs believe the need for national bodies would be removed.

The UGC would be abolished and responsibility for planning all higher education given over to the Council of Local Education Authorities. All major institutions of higher education would be granted corporate *status and would be funded through* a single HE pool.

Regional advisory councils would be reformed rather than abolished, taking in responsibility for the universities but accepting reduced powers over course approvals. Local education authorities would also be given the power to downgrade designated courses to alter the balance of awards.

The minority report is also understood to recommend the abolition of the Universities Central Council for Admissions because it is considered to exert undue influence on sixth form studies.

Research councils would take over responsibility for administering the UGC's share of research funds and dual funding would apply to departments, rather than to institutions as now.

Both reports are expected to stress the importance of continuing education and to support the continued funding of the Open University through the DES.

Finniston pleads with Sir Keith

A last minute attempt to save the proposed new engineering authority has been made by its chief architect, Sir Monty Finniston, in a confidential letter to Sir Keith Joseph, the Secretary of State for Industry.

This now follows recent reports from the Department of Industry that Sir Keith may choose not to set up a strong *statutory* authority to register, accredit and control the engineering profession and its education as proposed by Sir Monty's committee of inquiry into the manufacturing industry. Instead, a far weaker, purely advisory chartered body may be established by Sir Keith whose membership he would personally select.

This proposal is similar to one recently put to Sir Keith by the Fellowship of Engineering, which stirred Sir Monty to protest vehemently about current developments over his committee's report. His letter describes the fellowship plan as last-minute and ill-considered and calls on Sir Keith to implement the engineering authority as originally proposed. Sir Keith's reply was non-committal.

There is now a great deal of confusion about Sir Keith's likely decision although current thinking at the department suggests that the Fellowship of Engineering plan may now be rejected. Some form of *chartered authority is still his most* likely pronouncement with a variety of different possible powers—only his announcement next week will resolve the dilemma.

Government set to cut university lecturers' 19.6 per cent deal

by David Jobbins

University lecturers and their employers meet civil servants on Monday in the face of Government determination to cut back their provisional 19.6 per cent pay deal.

Agreement on a deal to round off the lecturers' 1979 settlement was reached in mid May, and despite repeated complaints from the Association of University Teachers about the delay, the Government's response was only made known privately this week.

Hopes of a quick settlement were dashed when officials suggested several alternatives to the deal, all involving a substantial cutback.

Although all parties are adhering to a strict secrecy pledge, it is believed that officials are proposing a reduction to below 15 per cent.

Objections to the lecturers' deal, which was hurriedly worked out to avoid a lengthy reference to the Clegg Commission, have been raised at the highest level. With the Government seeking a tough new stance on public sector pay, the Prime Minister and senior Treasury ministers are unhappy at similarities between the deal and the Clegg award of 18.2 per cent to further education lecturers.

It was therefore to be expected that there could be an attempt by the Government to trim 4 per cent from the provisional settlement.

While declining to talk before the resumed negotiations, AUT leaders have repeatedly stressed that the deal is within the cash limits imposed on the universities and relates to the 1979 pay round. They have been afraid that delays might lead to a repetition of events in 1975 when an agreed settlement hit a Government pay initiative. It seems their worst suspicions have now been confirmed.

Attributors setting the colleges lecturers' 1980 claim have recommended a 13.5 per cent £95m award made up of 12 per cent from April 1 and a further 2 per cent from September 1.

Their report, which mirrors the recommendations for school teachers, has been with Mr Mark Carlisle, Secretary of State for Education, for a week. While there was still a chance the findings might be published this week, it seemed that next week would be more probable.

A meeting of the Burnham education committee was arranged for today in the expectation that the report would have been available

Continued on back page

Doubts raised over UGC running OU

by Charlotte Barry

A confidential report being considered by the University Grants Committee throws doubt on its ability to take over the funding of the Open University, which is at present financed directly by the Department of Education and Science.

The report of the working party set up by the UGC concludes that the committee could not assess the needs of the OU through the same internal procedures as those which apply to all other United Kingdom universities.

As a result, several major problems would have to be resolved before any decision could be taken.

This negative conclusion, disappointing for the OU, was reached by the 10-member working party, chaired by Professor D. S. Jones, professor of mathematics at Dundee University, after seven months. This involved visits to the OU and its regional offices, meetings with staff and students and the consideration of written submissions.

The most immediate issue is the necessity to secure assurances that the financial affairs of the OU could be conducted within the conventions of the UGC system, with the minimum of outside financial control.

Also causing concern is the structure of the OU itself, which the working party concludes would have to be changed to ensure a professorial majority.

Another top priority is the need to consider whether transferred funds could be earmarked for a minimum of two years for the OU's recurrent grant and five years for the capital grant. This would arise from taking into account the different recurrent grant needs of the OU which include the relatively high fixed cost, low marginal costs, a lower contribution from student fees to total income and its relationship with the BBC. At the moment the OU is continuing its building programme at a cost of about £2.5m a year, which could swallow a disproportionate amount of the UGC's total capital grant of £10m.

The working party calculates that the process of taking over responsibility for the funding of the OU would involve expanding the level of staff at the UGC.

The working party envisages the need for a small group to calculate the OU's grant level and recommends that its equipment needs continue to be dealt with separately.

It concludes that although the OU provides the same order of "intellectual challenge" as undergraduate courses at conventional universities, its low volume and quality of research could cause problems if it is accepted on to the UGC grants list.

An expanded and revised programme of UGC visits would have to be set up to allow for the OU's decentralised structure, and a policy for part-time students' fees would be needed.

Contents

The amazing Cobb

Peter Scott talks to Richard Cobb in the last of a series of profiles of leading historians, 7

Oswald Spengler
Michael Biddiss reassesses the intellectual contribution of Spengler on the centenary of his birth, 9

Word and person
Roger Sharrock reviews a new American study by Gerald Graff of the place of literary criticism in modern society, 11

Colombo conference
John O'Leary discusses the controversial issues that will face next week's Commonwealth education conference in Sri Lanka, 8

Leader, 23

Values of failure
Stephen Prickett asks why so many eminent Victorian writers rejected their formal education, 10

Famine amid plenty
Patricia Santinelli reports on the growing shortage of specialist teachers in maths and other subjects in schools, 6

North American news	4
Overseas news	5
Books	11-14
Science books	14
Noticeboard	15
Classified index	16

Opinion
Union view (APT), Christopher Price, Don's Diary 21
Laurie Taylor, Letters 22
Leaders (graduate employment, Government secrecy, Commonwealth conference), William Taylor 23

Technicians lodge new claim

by David Jobbins

University technicians meet their employers today to lodge their 1980 pay claim hot on the heels of this week's Clegg commission award which gave them 19.5 per cent on their October 1979 rates.

While still angry at what they regard as a series of delays in the comparability exercise which led to the report, union officials accept that the findings are binding.

This week's report, which awards 12 per cent from April this year, is the second dealing with the 20,000 university technicians' pay. After an interim report their salaries were increased by eight per cent last October.

A further 6.5 per cent has been paid from April 1 this year—and the new money, equivalent to 12 per cent on current rates and adding £9.6m to the salary bill, is also payable from then.

While Association of Technical, Managerial and Supervisory Staffs officials are declining to say exactly how much their 1980 claim will be, they have indicated they will have to take into account the increased cost of living since October last year, and movements in technicians' salaries outside the universities. The 1980 claim would be payable from next October.

A survey carried out for the commission found that universities found it more difficult to fill vacant posts than other organizations with which they were compared. Pay and conditions of service were most frequently identified as the reason.

The new salaries will give a 21-year-old trainee £3,297 and the highest paid technician a maximum of £9,045, compared with a range of £2,760 up to £7,569 in October last year.

The Clegg award also includes lump sum payments totalling £1.4m to take account of a change in the base date for the survey from October 1978 (for the interim report) to October 1979 (for the latest report). Individual lump sums vary from £46 to £140 according to grade.

It also provides for a restructuring of the bottom end of the grading system which has been agreed by the technicians and their employers.

Teacher trainers told to provide more maths

by Patricia Santinelli

The Government has issued a stern warning to all teacher training institutions that they must act to avert a serious imbalance in the subjects they are providing or face the consequences.

In a circular issued last week the Department of Education and Science said the pattern of teacher training recruitment had shown a marked divergence from the subjects needed in schools.

Enrolment data for 1979, "suggests that a large number of institutions are considerably exceeding their planned numbers in three to four year courses in non shortage subjects, particularly physical education, and falling well below them in the subjects in most acute shortage—mathematics, craft design and technology and above all physical science. 1980 recruitment figures suggest a similar picture," said the circular.

It pointed out that on present forecasts the size of the teaching force required will fall below the planned 420,000 to some 400,000—much lower than the agreed output of 16,000 to 17,000.

The circular warned that unless colleges control recruitment in non-shortage subjects and increase it in shortage subjects many newly qualified teachers will be without jobs.

BEd and PE courses should have at least 20 students in single groups and 30 in mixed ones and colleges with planned numbers well below those levels should reconsider whether to provide specialist PE courses, it said.

"However institutions with strong PE courses only slightly below the norms might consider increasing their size if they can offer a short supply second subject in the sciences, modern languages or music, since there is evidence that employers are increasingly looking for this kind of combination" said the circular.

It recommended that PE main method courses in the Postgraduate Certificate of Education should be offered only by institutions with a particular strength in this field. Institutions are also being advised to consider providing opportunities for non-shortage subject students to take a second course in a shortage subject where staff and resources are available.

Professor Charles Phelps, at present Professor of Biochemistry at Lancaster University, has been appointed principal of Chelsea College, University of London.

Professor Phelps succeeds Dr David Ingram, who is leaving Chelsea to become Vice-chancellor of Kent University. He joins the college as it is about to implement development plans made possible by the acquisition of the former site of the College of St Mark and St John.

Lancaster aims to help traders

Areas of teaching and research at Lancaster University which could help local business and manufacturing firms cope with problems caused by the economic recession are to be explored by a joint working party set up by the university and Lancaster and District Chamber of Commerce.

In particular the working party will be aiming to encourage short courses, seminars and consultancies to benefit trade and industry in the Lancaster region and to make widely known to the community the availability of university facilities.

It will also monitor changes in local need and developments within the university and will meet regularly under its joint chairman, Professor Keith Morgan, assistant vice-chancellor of the university and Air Marc Godfrey, of the chamber of commerce.

Mr John Perry, organizing tutor for extramural studies at the university and secretary of the joint working party, said: "The university has among departments of science, engineering and management studies which have always enjoyed a close association with the local community.

"We are anxious to develop these links in a more extensive way, so that the university will become still more responsive to local needs. The university departments involved will also benefit because contact with outside organizations invariably enriches teaching and research."

The establishment of a working party is the third of a series of ideas under consideration for linking Lancaster University more closely with its local community.

In April the university announced it was opening undergraduate lectures to members of the public free of charge from next session, and last month the senate approved a scheme to make the first year of all undergraduate degree courses available on a part-time basis.

"The university's latest move reflects the growing demand for continuing education courses aimed at updating professional or technical knowledge," a discussion paper pinpointing possible areas of innovation which will also identify the problems which have so far hindered higher education institutions from responding satisfactorily to the demand is expected to be published by the Department of Education and Science in the autumn.

Aston graduates top jobs league

Only 2.8 per cent of graduates from the University of Aston in Birmingham were still seeking employment at the end of the year. This maintains the university's record over the past few years of having the lowest unemployment rate of any British university or polytechnic.

In its tenth annual report, the careers and appointments service said the current economic recession had seen no change in the employability of Aston graduates, with 77 per cent of those entering employment going into industry and commerce.

As a technological university, said the report, Aston tended to specialise in applied degree courses in some of which there was an acute shortage of graduates.

The demand in the recent year was for electrical, mechanical and production engineers and computer scientists had been at a premium, and many posts were open for physicists and mathematicians, and in all branches of accountancy.

While unemployment, particularly among young people, had increased over the last 3-4 years, it concluded the report, there was no evidence of long term unemployment among graduates although they were taking longer to find jobs.

They were also working for a greater variety of employers and performing a wider variety of functions than 10 years ago. In 1970 some of the jobs currently filled by graduates would have been thought inappropriate for them and would have been filled by school leavers.

These included logistics, sales engineering, computer programming and the civil service.

Nuffield warns against increasing science study

by Robin McKie
Science Correspondent

There is no case for increasing numbers of science studies courses at British universities and polytechnics while they suffer their present poor public esteem, the Nuffield Foundation warned this week.

In a report published by the foundation, Sir Alec Cairncross, former Master of St Peter's College, Oxford, points out that about 6,000 students—including those of the Open University—now take such courses. These figures have been achieved through a relatively rapid rise in courses over the past 10 years, although there is now no immediate case for adding more.

This expansion has concentrated on courses in social aspects of science and technology, while undergraduate courses in the history and philosophy of science are tending to decline slightly.

"Further demand is now limited by factors susceptible of change: the ignorance of school-leavers and their doubts whether their job prospects might be prejudiced; the scepticism of their advisers; the demands on teachers in polytechnics and universities and the narrowing of their chances of promotion", the report adds.

To improve matters, science must be convinced that science studies courses are intellectually demanding and have something of importance to put across. Such courses are also of help for undergraduates wishing to pursue careers in business or administration.

"Some form of combined study should be capable of attracting an increasing number of science students when a large proportion of them do not expect to be in employment that will make much call on their specialized training", the report states.

Other approaches could include more joint honours degrees, straddling science on one hand and arts or social science on the other, and the development of a postgraduate year devoted to the study of science and technology in their social and economic context.

"The MSc courses at Manchester and Aston, for example, attract graduates both in arts and science with a strong motivation to examine important issues in science policy", the report adds.

Sir Alec concludes that there is also need for just as much effort and public interest in science education and in organizing education in the subject as has been shown in engineering education.

College unions join attack on new Employment Bill

The polytechnic and college lecturers' union is to join in the general condemnation of the Government's latest employment law when the Trades Union Congress meets in Brighton in September. The National Association of Teachers in Further and Higher Education is one of seven unions with motions in the preliminary agenda bitterly critical of the 1980 Employment Bill.

The 70,000-strong union demands repeal of the parts of the legislation which weaken trade union rights and calls for a new employment law including the right to at least 60 days' consultations and a minimum of one year's pay as compensation in the event of redundancies.

An attack on cuts in local authority services also comes from Natfhe, in an appeal to the TUC general council to seek ways of intensifying the Campaign for Economic and Social Advance, launched at last year's congress.

Natfhe wants congress to instruct the general council to place education, training and retraining programmes for adults at the centre of the campaign.

Calls for an expansion of training programmes are also embodied in resolutions from other unions condemning the Government's wider economic policies and their effect on employment.

The higher fees for overseas students come under attack from the Association of University Teachers, with a motion seeking continued pressure on the Government.

Oxford don predicts loss of extra mural state funding

by Charlotte Barry

The present system of public financial support for university-based adult education cannot survive the decade, Mr Dick Smethurst, director of the department for extramural studies at Oxford University told the Standing Conference on University Teaching and Research in the Education of Adults (SCUTREA) at Guildford.

Instead there will be increased pressure to replace the traditional non-vocational kind of adult education provided by most extra-mural departments with continuing education courses paid for by the professions, business and manufacturing industries, Mr Smethurst said.

"I think over the next ten years the major trend will be pushed much closer to the American pattern of university adult and continuing education where the universities think they are doing very well if they get up to a third of their income from state and public funds," he told members of the conference.

"The universities will not only be faced therefore with going into continuing education but also agreeing with what are almost contractual arrangements. "In other words, we are going to have to do the kinds of things that clients want us to do and this could threaten our professionalism," he said.

Mr Smethurst included his prophecy in a speech in which he emphasized how the combination of inflation and high unemployment will mean that adult and continuing education will be more needed than ever.

He told the conference that two years ago there were indications that resources would become available for adult education because of the falling rolls in schools, but the only substantial public funding made available in this area was for the unemployed.

"It would have needed a positive decision to transfer resources to adult education and I don't think it's going to happen," he said. "Instead there will be a call to the universities to be more relevant which will increase the disparity rather than decrease it."

Technology 'helps study'

Adult education has a major part to play in helping people appreciate the social consequences of new technology, Mr Geoffrey Hubbard, director of the Council for Educational Technology, told the SCUTREA conference.

"It must set up the debate and encourage the debate along . . . for what adult education can do well and is an area of greatest importance in the next decade", he stressed.

Explaining the new technologies available to education—from broadcasting to computers—Mr Hubbard warned that their use raised fundamental questions about the traditional roles played by adult education and adult education institutions.

"The history of education has been based on the idea of teacher as mediator and controller", he said. Now more individual learning methods enabled students to exercise more control. Adult educators were going to have to decide whether they were going to stand in the way, or help students use new techniques to their best advantage.

Building society launches OU saving scheme

One of Britain's largest building societies is linking up with the Open University in an exclusive savings scheme to help students meet higher fees and the rising cost of studying at home.

The Leicester Building Society is offering the Open University's 75,000 students a chance to use its regular monthly savings plan which has been refined to give them special withdrawal arrangements.

The students will receive the existing premium of 1.25 per cent above the ordinary share rate and will have the added bonus of being able to make extra withdrawals provided they are to pay for text books, fees, travel and other home study costs.

The scheme will be launched next month when the Open University circulates details to all its students registered in the United Kingdom, who will be given the option of having their fees paid directly by the building society from the university's bank account.

At the moment undergraduate students pay costs averaging £100 a year over a period of six or seven years, leading to a total outlay between £1,000 and £1,500. In the absence of mandatory grants for part-time students and faced by the gradual withdrawal of discretionary support from local education authorities, many students are facing increased hardship.

Committee will opt for openness and flexibility

John O'Leary reveals the likely recommendations in the forthcoming Commons' report on higher education

A new openness and greater flexibility both at national and institutional level are at the root of the fundamental changes recommended in the final draft of the Education Select Committee's report on the funding and organization of courses in higher education.

The draft, which was the product of a weekend meeting to discuss Mr Christopher Price's initial proposals as chairman, is expected to run to more than 100 pages and to cover the full range of higher education provision in varying degrees of detail.

It is understood to contain scathing criticism of the Department of Education and Science, which the MPs believe should be relegated to a monitoring role, intervening in policy questions only in exceptional circumstances. The DES responsibility for course approvals would disappear totally.

The report would propose new planning machinery for higher education, involving the establishment of a national body for the public sector, known as the Committee for Colleges and Polytechnics (CCP), which would work in concert with the University Grants Committee. The two bodies would have a joint secretariat to coordinate planning with the assistance of DES assessors.

Course rationalization, combined initiatives in the field of continuing education and retraining or redeployment of staff would be among the responsibilities of the joint machinery in the first place. Later, the opportunities for closer cooperation might enable institutions to transfer between the two national bodies as appropriate to their developing roles.

MPs Dafydd Thomas (left), Stan Thorne (centre) and Patrick Cormack will want to see changes in the draft.

The UGC, which is recommended to recruit more lay members from industry and the local authorities, and the CCP should both be established for a limited period after which their functions should be reviewed, the committee believes. Both should be subject to the Public Bodies (Admissions to Meetings) Act, which does not apply now to the UGC.

Such openness is also recommended for the individual institutions, which would be expected to submit annual reports on their activities to the UGC or CCP and make these available to the public. Institutions would also make a statement to their national body on their role and objectives, which would be used as a yardstick to measure progress. Within the constraints imposed by such a definition, there would then be maximum institutional autonomy.

Polytechnics would also be given corporate status but would not achieve their desire for freedom from local authority control. Instead, a voluntary code is advocated to protect institutions from unwarranted interference by authorities.

Looking further ahead, the committee foresees an end to the binary system before the end of the decade, while wishing to maintain the variety of provision available at present. With the development of centres of excellence considered likely in a restricted network of research funding, distinctions between some universities and public sector institutions are expected to become blurred.

The continuation of the dual funding system for research is supported, with the existence of major support for research becoming the likely prerequisite to administration by the UGC. The exception to the funding rule would continue to be the Open University, since the MPs do not support proposals for its transfer from DES finance.

The Open University is considered to have a pivotal role to play in the development of continuing education—a high priority in the committee's draft report. Proposals for the establishment of an Open Tech also find support, with a system of credit transfer ensuring student mobility.

Continuing education is also singled out for special mention at the predominantly full-time institutions. The MPs hope that the decline in the age participation rate, which is expected to continue at its present low rate, will be used as an opportunity to emphasize retraining and the recruitment of more mature students generally.

Little credence is given either to detailed manpower planning or the DES alternative of a "Broad Steer" of subjects as a basis for higher education provision. Although studies of manpower requirements are thought important, only in postgraduate education are they considered capable of forming the basis for planning.

The committee does favour a radical alteration of the system of course approvals in the public sector, however. It recommends the abolition of the Regional Advisory Councils because they are said to constitute an unnecessary layer of bureaucracy, and proposes the removal of responsibility for higher education from the Regional Staff Inspectorate.

No recommendations are made on the subject of student loans, despite the allocation of a complete session of the inquiry to the subject. Instead, the draft is likely to call for a review of the designation of courses as either mandatory or discretionary for the purpose of awards, and the abolition of the parental contribution to student grants.

The committee also supports the introduction of bigger grants for student teachers training in shortage subjects and enhanced salaries for these subjects in the schools. Both measures are advocated only as an emergency measure and differential grants would require a guarantee of future service by the student.

One radical change is advocated in the field of student finance, which is to raise tuition fees for home students to about one-third of full cost. Such a level would facilitate the extension of the number of countries to be exempted from the new overseas rates. At the same time, discussions would be held to build in safeguards protecting the weaker institutions from the drop in student numbers which such a change could bring.

Directors support social teachers in blacklist row

by Charlotte Barry

Directors of social work courses in Midlands polytechnics and universities are backing colleagues who have accused social services departments of operating an unofficial blacklist of "unsuitable" courses.

In a statement supporting an open letter sent recently to Priscilla Young, director of the Central Council for Education and Training in Social Work, they say that many teachers of social work are becoming increasingly alarmed by the move by outside authorities to have greater influence over the content, organization and examination of courses leading to the Certificate of Qualification in Social Work.

"These discreet moves towards greater control are in the most fundamental anti-educational sense and the cumulative outcome could have a devastating effect on the ability of educationists to rise not only to the needs of their students, but also to their obligation to contribute to the future development of social work theory and practice".

Directors and chairs of social work courses in the Midlands who signed the statement include Professor Rolf Olsen of Birmingham University, Professor Martin Herbert of Leicester University, Dr John Baldwin of Trent Polytechnic and four other academics.

They add that their unease is heightened by the "linguistic sleight of hand" which appears in some of the council's papers and in particular by the council's recent statement to amend its guidelines for courses leading to a certificate.

"This says that the content of courses will remain a matter for individual institutions but interprets its responsibilities to detail prescription of the content and organization of courses, say the directors.

Acknowledging the major task the council has played as the validating body for social work courses and their promotion over the last decade, the statement continues: "However, in its desire to ensure minimum standards it has been over concerned with drafting governing regulations to apply to all courses and has failed to discriminate between the contributions and needs of institutions in the separate and quite distinct educational sectors."

The original open letter to Miss Young, which was published in the social work magazine *Community Care*, was signed by 15 senior social work lecturers in universities and polytechnics. It accused the central council of being less than resolute in defending courses against employers' pressures.

In reply to the accusations, Miss Young has said that she considers employers and professional organizations as much as educators have an important contribution to make to the content of social work courses and the debate between them is essential for the development of social work education.

Pensions deal accepted

University lecturers are voting overwhelmingly in favour of an improved scheme to protect their pensions in the event of early retirement through ill-health.

With the deadline for a ballot of Association of University Teachers members this week, it was clear to union officials from returns to hand that the vast majority approved the scheme.

It means that lecturers with at least five years' service would have their reckonable service for pensions purposes calculated as if they had worked until the normal retirement age of 65. The AUT recommended the scheme to its 32,000 members arguing that especially for younger lecturers the benefits were quite out of proportion to the cost.

The cost of the scheme would be borne by lecturers themselves—who would contribute a tax-deductible 0.1 per cent of salary.

Lecturers have effectively been forced to pay for an improvement in the existing scheme because of the implications elsewhere in the public sector if employers agreed to contribute.

The new system replaces the complicated arrangement under which members with between five and 10 years' service were allowed double the length of service in calculating reckonable service; those with 10 to 134 years' service were allowed 20 years; and those with more than 134 years' service had six and two-third years added.

Dubai's gift helps Exeter

A new library for the University of Exeter is being partly financed by a £750,000 gift from the ruler of Dubai, His Highness Shaikh Rashid bin Saeed al-Maktoum.

The £325,000 first phase of the project—the ground floor of what will be a four-storey air-conditioned building—is already nearing completion, its cost met through the University Grants Committee.

Now the university is confident of a start on the final phase in 1981—with the remainder of the £2.3m still needed raised from Government and perhaps other private sources.

The university understands that the gift flows from his promotion of study and research into the contemporary Arab world—with an emphasis on The Gulf area.

In addition to the university's Department of Arabic and Islamic studies, the Centre for Arab Gulf Studies, set up in 1978, is the only research centre in the western world specialising in the region's social, economic, political and historical questions.

Recruitment defies prediction of slump

Student recruitment to diversified degree courses in the colleges and institutes of higher education is showing a surprising upturn despite predictions of a slump.

Figures released this week by the Central Register and Clearing House reveal a drop of 6 per cent in the numbers accepted on to degree courses other than the BEd. But, with more colleges carrying out their own recruitment this year, the real figure is expected to show a healthy increase.

Recruitment for teacher education courses is still giving concern, with a 24 per cent decline still looking for the BEd and some also subjects showing an even more drastic drop in numbers.

Miss Beryl Sowerbutts, secretary of the Clearing House, said this week: "On the whole, the diversified courses are improving. Some are already full, more especially the specialized courses, and we have no *cris de coeur* from any of the colleges."

At the college of Ripon and York St John, enrolments have increased fourfold outside teacher training and elsewhere courses in music, home economics, sports studies and communications are reported, full already. Traditionally, students are recruited throughout the summer by the colleges.

Although final figures will not be available for several months, the position contrasts sharply with predictions of large numbers of diversified courses falling foul of the more stringent application of the course approval mechanisms.

Figures quoted by the Committee of Directors of Polytechnics claimed that the average recruitment per institution for the diversified courses was running at only 40 students. Miss Sowerbutts said that some of the smaller colleges might have an annual recruitment of this order where diversification was not yet complete, but most would have 100 students or more.

North American News

Choice of trustees is 'too haphazard'

from Clive Cookson

WASHINGTON

Selecting procedures for the governing boards of the United States' 3,000 colleges and universities are in drastic need of improvement, according to an independent commission sponsored by the Association of Governing Boards (AGB). Trustees are generally chosen haphazardly, without any guidelines and, as a result, boards lack diversity and balance, particularly in the private sector, while in the public sector they are very vulnerable to political pressures.

University and college independence in the United States has suffered "general and pervasive erosion" as a result of federal and state government intervention, the commission said, and stronger and more effective governing boards are an essential defence against further loss of autonomy "from both the changing winds of partisan politics and faculty and student demands for greater control of institutional affairs".

Public and private institutions share the same basic system of governance by lay boards whose members are usually called trustees or regents. They are responsible for the appointment of the institution's president and ultimately for its financial affairs. (The commission claimed that this system is uniquely American.)

Nevertheless the Commission decided there were sufficient differences between the private and public sectors to bring out a separate report for each. Many recommendations appear in both reports, however, including one that provoked immediate controversy: that "students should not be voting members of the governing boards of the institutions in which they are enrolled."

"The commission believes that extensive student participation on board committees is desirable, but that students as full voting members of the board create a conflict of interest. A student trustee is presumed to represent an internal constituency", the reports said.

The commission is also concerned that student trustees only serve for a short period of time: too often the student trustee's term has expired just when the student has begun to understand the job."

The head of the United States student association, Frank Jackalone, said the recommendation "makes little sense but to express a degree of paranoia. The fact is that many universities that have chosen to or been required to add a student representative would rather have that student be a voting member who can be held responsible to the governing board ..." The association said it would campaign to get "students and sympathetic leaders of the higher education community" to "repudiate the unfortunate section of the report."

Although representation on governing boards was one demand of the student movement in the late 1960s, the number of institutions that have actually given students a voting seat on the board is small—less than 1 per cent, according to Kenneth Mortimer, director of the Centre for the Study of Higher Education at Pennsylvania State University, who directed the commission. Some sort of non-voting student representation is much more common.

However, the few universities that do give their students the right to elect a voting trustee include some large and visible institutions, such as the State University of New York, where a student trustee is mandated by law. Suny Chancellor Clifton Wharton, who served on the commission, observed that sometime "the symbolism of membership with vote merely leads to frustration on the part of the student trustee and to attempts to increase the number of student trustees even further".

The report on trustee selection in the public sector concentrates on the need to insulate the process from the political pressures to which it often succumbs. By far the most common procedure is for the state governor to appoint trustees, who are then confirmed by the state Legislature.

"Often the appointment of trustees is part of the political patronage process," the report says. And where it is not, the governor is frequently handed lists of nominees put together haphazardly by his staff.

The answer to these problems, according to the commission, is to introduce "a careful search and screen process" for trustees. Every state college and university should have its own nominating committee, to search out qualified nominees whose appointments would give the board the best mixture of skills and backgrounds (ethnic, racial, sexual, social and political). The governor would then have to choose trustees from the list of names sent to him by the nominating committee. (In five states, governing boards of public four-year colleges and universities are directly elected by the general public. The commission disapproves of elected trustees, because they do not usually provide a balanced, diverse board.)

"In contrast to the state systems, the boards of private institutions are self-perpetuating. According to the commission, "trustee selection procedures in the independent sector can be at best haphazard and at worst casual."

Very few colleges and universities in the private or public sector already follow the guidelines recommended in the commission's two reports. Robert Gale, president of the Association of Governing Boards, promised to devote "tremendous energy" to get them adopted more widely, by lobbying his organization's own membership, state legislators and educational leaders around the United States.

If the commission is to be believed, the effort is important: the future of the lay governing board as a viable alternative to direct state or federal control of colleges and universities will depend in large measure on the competence of those who are chosen to serve as trustees and regents.

Board reaffirms war sacking

The governing board of Stanford University has reaffirmed the controversial sacking of Professor Bruce Franklin eight years ago. The trustees accepted the unanimous recommendation of the university's advisory board, an elected group of faculty members, that dismissal remains the appropriate penalty for Professor Franklin's activities in 1971, when he allegedly incited violence at a campus rally against the Vietnam war.

Stanford reopened the case at the request of Judge John Flaherty, who found Professor Franklin not guilty in 1978 on one of three charges of incitement. But the advisory board concluded: "We do not believe that the question of culpability is much affected by whether Professor Franklin incited and participated dangerous and disruptive activities on three occasions, on the same day or only on two or even none. His purpose in each occasion, according to the findings of the 1972 (advisory board) was to disrupt the normal functioning of Stanford University because of its supposed responsibility for imperialism and the Vietnam war, and to do whatever he could to encourage disruptive and destructive conduct while safeguarding his own position as a tenured professor."

However, the university's reaffirmation of the dismissal is far from the end of the case. Judge Flaherty could still order Stanford to reinstate Professor Franklin, who is now tenured professor of American literature at Rutgers University in New Jersey, if he decides the sacking was unfair.

The American Civil Liberties Union is fighting for Professor Franklin's reinstatement, and ACLU lawyer, Margaret Crosby, said that whatever the judge's decision, the losing side would almost certainly appeal to the California Court of Appeals and then probably up to the California Supreme Court. By then, judging by the rate of progress so far, Vietnam war protests will be a very distant memory.

Columbia man to head open university task force

from our North American editor

William McGill, who has just retired as president of Columbia University, is to head a task force that will draw up plans for an American open university, financed in part by a $150m grant from Walter Annenberg, the publishing multi-millionaire.

This announcement follows a ruling from the Internal Revenue Service that the Annenberg School of Communications, Mr Annenberg's educational foundation, can give the Corporation for Public Broadcasting $10m a year over 15 years, without adverse tax consequences.

Other high-powered members of the task force are Robben Fleming, president of the Corporation for Public Broadcasting and former president of the University of Michigan; Maurice Mitchell, chairman of the board of directors of National Public Radio and former Chancellor of the University of Denver; Newton Minnow, former chairman of the board of directors of the Public Broadcasting Service; and George Gerbner, Dean of the Annenberg School of Communications at the University of Pennsylvania.

It seems that neither the Corporation for Public Broadcasting nor the Annenberg officials has a firm idea yet of the best arrangements for the "National University of the Air", as Mr Annenberg has called the proposed institution. All they will say is that it will offer college credit courses through public radio and television and "other telecommunications media" "for students who cannot afford the cost of on-campus education".

Mr Annenberg, former American Ambassador to Britain, is known to believe that the courses should be aimed at the 18 to 21 age group, but members of the task force may lean toward the conventional view that the greatest potential for

The old and the new: Britain's Lord Perry (left), vice-chancellor of the OU, and William McGill, leader of the US project.

an open university lies in the adult population, in particular people in mid-career.

Walter Perry, vice-chancellor of Britain's Open University, believes strongly that it would be a mistake for anyone planning a similar institution in the United States to rely on the traditional college age population. In an interview in New York, where he was visiting the American office of the Open University (known as the British Open University Foundation), Lord Perry said there were both political and academic reasons for going after adults.

Politically, he said, an American open university would antagonize "every traditional college" if it competed for their young undergraduates. But they would welcome it if it brought mid-career adults back into the higher education system.

In addition, studies and the experience of the Open University in Britain had shown that distance learning is not suitable for many 18 to 21 year olds, Lord Perry said. "They drop out like flies."

Lord Perry is well aware of the problems to be faced in establishing an American Open University. Five years ago, at the request of Prime Minister Harold Wilson, he communicated his ideas on the subject to vice-president Nelson Rockefeller, who was considering setting up a commission to study possible open learning systems for the United States. But nothing came of it.

"I don't think anything is likely to get off the ground in the United States without making use of an awful lot of our material, rather than to reinvent the wheel", said Lord Perry.

He added that, if an American open university did get established, he would favour a "barter system" between it and the British Open University, whereby the two institutions would swap ideas and no money need change hands. But Lord Perry does not believe Anglo-American coproduction of OU courses could work, except on a small scale.

Meanwhile, the future of the British Open University Foundation remains uncertain. Its funding is safe until the end of 1981, but Lord Perry and Peter Princep, the foundation's executive director, are looking for American funds to keep it through 1982 and beyond. The foundation and its office in New York cost more than $1000,000 a year to operate, and the OU has made clear that in future years its income must come from American sources.

"It's vital to keep this office open", Lord Perry said. "Two years ago I made clear that I was not going to keep it open at the expense of the British taxpayer."

Medical schools pressed to end their 'educational birth control'

For years, debates have raged over who should be admitted to medical school. Blacks, women and other groups have lobbied successfully for increased access to training in the nation's 126 medical schools because they feel they had a unique contribution to make to American medicine.

Now a new group, American student who failed initially to gain a place in medical school at home and went abroad to study for two to four years, are asking that this country's medical schools increase the number of training programmes available to them.

These students, mostly from the populous states of California, New York, Illinois and New Jersey, contend that they were denied entry not solely on the basis of their academic qualifications but because all public and most private medical schools give preference to residents of their states.

They say that America is losing some of its best medical school students to schools in Mexico, the Caribbean and Italy because those students had the misfortune of living in states with large numbers of applicants and few openings in medical school classes. They contend that they had higher grades and test scores and better qualifications than students from smaller states where competition was less intense.

Groups such as the Californians for Increased Opportunities in Medical Education, a 200-member organization of parents of students who attended foreign medical schools, seek to have the federal and state governments finance additional training for Americans who complete their initial training abroad.

"California schools only admit one in 25 to 30 applicants, compared to the University of Alabama, which admits one student out of 3.5 applicants", said David Rileson, a Stanford University physics graduate and Northern California chairman of the group. "It is no accident that over one-fourth of the estimated 10,000 American medical students studying abroad are from California and another quarter are from New York State."

Medical school officials say, however, that it makes no sense to force expansion of the schools at a time when many experts believe America is facing an oversupply of physicians. Because medical education is so expensive, American schools feel justified in discouraging Americans planning to transfer from foreign schools, especially if the foreign curriculum and teaching methods were so different that additional clinical training is necessary.

Many of the students are like Barry, a California student now enrolled in the autonomous university of Guadalajara, the largest private university in Mexico, with more than 2,500 of its graduates already practicing medicine in the United States.

After teaching biology for six years, Barry decided to apply to medical school. Although his "minus grade point average, entrance examination scores and volunteer work in a hospital emergency room would have won him a place for admission at many of the nation's medical schools, Barry was not accepted by any of the California schools.

Barry's experience is not unusual, according to Carlos Pestana, chairman of the admissions committee of the University of Texas at San Antonio.

"By the time they transfer, the US foreign students are the cream of the crop", wrote Dr Pastana in his book, *The Rejected Medical School Applicant*.

"By and large, they have made superb students at their American schools because of their motivation and determination", he said. Fewer than half of all United States medical schools accept transfer students, who have completed two years of basic science training abroad and have passed Part O1 of the national boards. Even when they do, the numbers accepted are small. Of the nation's medical schools accepting 25 to 30 transfer students a year.

A separate system, known in medical jargon as the "Fifth Pathway", allows American graduates of foreign medical schools to enter their fifth year in a United States hospital, but this programme is very limited. Last year, only 41 students had fifth-pathway programmes, but many were considering climbing on them to avoid the oversupply of physicians that is predicted by the 1990s.

Students like Barry accuse United States medical schools of "practicing educational birth control to keep the number of graduating physicians down and incomes up".

"There are many underserved areas that desperately need medical services", he said at the annual meeting of Californians for Increased Opportunities in Medical Education. "California has one physician for every 560 people, but the blacks of Watts have only one physician for every [illegible] residents".

In 1977, 20 per cent of the 363,300 physicians practicing in the United States were foreign-trained abroad are an important resource that shouldn't be overlooked", said Art Kern, a Los Angeles engineer whose son expected the first two years of medical school in Mexico before transferring to UCLA. "They are wonderful physicians, because they have had to overcome so many obstacles here and abroad".

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Overseas News

Course pruning hits postgraduate study

by Guy Neave

Major changes in the structure of postgraduate studies in France are on the way following the refusal by the Ministry of Higher Education to validate many of this year's submissions to start new postgraduate courses.

The smaller universities—Limoges, Rouen St Etienne and Avignon—will be particularly hard hit. Among the subjects to be pruned are psychology, education, sociology and modern languages except English.

Permission to start new courses at the third and fourth year of undergraduate study as well as the more advanced degrees like the *diplome d'études approfondies* and the third cycle doctorate comes from the National Council of Higher Education and Research which comes directly under the control of the ministry.

Earlier this year discussions within the council left many university deans with the impression that the cuts were in the pipeline few were prepared for what amounts to an across-the-board refusal to validate further courses and a withdrawal of validation to some which have already been put on.

At the University of Amiens six third-cycle (postgraduate doctoral level) courses have seen their validation withdrawn and a further four second-cycle (third and fourth undergraduate years) courses have been abolished. "This amounts to nothing less than the beheading of the university of Picardy", said the vice-chancellor.

At the University of Tours postgraduate courses in sociology, psychology, general and comparative literature and planning have been closed down by ministerial fiat. Similar cuts have been introduced at Pau and Chambery in eastern France. The Minister for Higher Education, Madame Alice Saunier Seite, justifies these measures on the grounds of a need to set up high level "universities and to concentrate specialized studies in the larger establishments".

This reverses her previous policy which, three years ago, tended to favour the smaller establishments and particularly those outside the Paris region. From the standpoint of the latest victims of the cuts more worrying is the fear that students will be less willing to enrole in those universities without graduate courses.

This development, says the *syndicat national de l'enseignement superieur*, the teachers' union will create a binary policy within the university sector itself of fully-fledged universities with postgraduate facilities and American-style liberal arts colleges concentrating on two-year general studies degrees.

The new development is exquisitely timed. It comes in the middle of the summer vacation. The minister has thus placed the university world in front of a *fait accompli*. There is little hope that the decision can be reversed before it is due to take effect at the start of a new academic year in October.

This way of proceeding is fully in keeping with earlier reforms of the conditions of service and appointment to university posts which were thrust upon the university world in the summer of 1979.

In an effort to counter this new policy the university teachers union has called upon its members to continue enrolling students in those courses which the minister has abolished.

Postgraduate students are being encouraged to continue enrolling.

Survey reveals gap in university access

from John Walshe

DUBLIN

The middle and upper classes are well represented in Irish universities. So too are farmer's children, but the offspring of semi-skilled and unskilled workers are seriously under-represented.

These are among the conclusions to be drawn from the first nationally available survey on the socio-economic background of full-time students attending the state's five university colleges.

The details are published in the latest annual statistical report from the higher education authority, a statutory body charged with co-ordinating state investment in higher education.

The latest report covers the academic year 1978-79 when there were 21,440 male and 15,716 female students in full-time higher education. This was an increase of around 4,000 on full-time enrolments for the year 1975-76.

The socio-economic background details relate to the 23,113 students attending university or the National Institute for Higher Education in Limerick. The remainder were in a variety of institutions, art colleges, technical, teacher training, etc.

Twelve different social groupings were used, the classification being the same as that in the 1971 Census of population (the latest detailed census available). In the academic year under review there were 3,915 farmers' children in the six colleges surveyed (in the 1971 census, one in every five inhabitants were classified as farmers).

There were only 167 children of agricultural workers in the same institutions, 14.3 per cent of the total population. The professional classes (higher and lower) did much better. Although they made up only 6.7 per cent of the total population in the last census, they had 4,817 children in the colleges reviewed. Employers and managers (5.1 per cent of total population) had 3,742 while salaried employees, insurance brokers, pilots (12 per cent of population) had 2,197 children in the colleges.

The two non-manual groups, clerks, draughtsmen and bus drivers, made up over a fifth of the population in the last census but had only 3,239 sons and daughters in the colleges.

The second biggest social category after farmers in the population at large were skilled manual workers—16.5 per cent of the total, but they had only 1,575 children in the college.

Semi-skilled and unskilled fared even worse. They made up a seventh of the total population but there were only 634 young people from these social groups in the six colleges under review. The socio-economic background of the remainder was unavailable.

The Union of Students in Ireland claims these figures prove that various government measures have not done enough to promote real equality of access to education, in particular, it has called for financial improvements in the higher education grants scheme to help increase the university participation by those from working class backgrounds. At present about a quarter of the university students are on grants which are awarded on a means test basis to those who get four honours in their secondary school leaving certificate examination.

Deans resign from posts in Sri Lanka pay dispute

from D. B. Udalagama

COLOMBO

A dispute over the pay of university teachers in Sri Lanka has led to more than 32 heads of departments resigning from their offices as deans in the universities of Colombo, Kelaniya and Sri Jayawardenapura.

They have been offered a 16 per cent increase in salaries backdated to January 1 as well as a special professional allowance for professors with a PhD.

The Federation of Teachers' Associations of the universities of Sri Lanka says the final take home pay of most teachers will increase by a negligible amount from the offer and argues that unless substantial changes are made the exodus of teachers to other institutions here and abroad is bound to increase.

It says a senior lecturer with a service of about 16 years will receive only a 3 per cent increase after the revision. A professor will get only a 5 per cent increase. The special professional allowance does not benefit most university teachers, it adds.

Internal students of the three universities boycotted the first examination in science, arts and law for 1980 which began on July 15, in support of the teachers' claims for higher pay.

Experts check radiation leak

from Martin Roth

TOKYO

Kyoto University authorities have launched an immediate investigation to discover why radiation leaks in the nuclear engineering department went unnoticed for 15 years.

Tiny amounts of strontium 90 and other radioactive elements were detected during a check of the radioisotope laboratory in April this year.

As a result, an exhaustive check of the building was carried out in June and July, and six classrooms were found to be contaminated.

Officials said experiments using radioactive materials had been carried out in the classrooms since 1965. Since 1967 only authorized personnel had been allowed to enter the rooms. It is not known how many leaks have occurred.

No abnormal symptoms have been reported among students or staff, but the university plans to conduct further safety checks.

India's rapid expansion fails to stimulate student demand

from A. S. Abraha

BOMBAY

One new university opens every three months in India and one affiliated college every two days, according to the first all India higher education survey for the academic years 1973-1974 conducted by the University Grants Commission.

Despite this rapid rate of growth, the survey concludes that the demand for higher education is declining. In 1969-70 enrolment was higher by over 225,000 compared to the previous year but in all subsequent years until 1973-74, the volume of extra enrolment declined; in that year, under 60,000 students over the previous year's figures are registered.

One heartening feature is the steady increase in women's enrolment. In 1966-67 they formed 21.5 per cent of the student body. In 1973-74 they made up 23.4 per cent, and in 1978-79, the latest figures available, they comprised 25.8 per cent.

One reason for this may be correspondingly declining men's enrolment in professional courses like technology, medicine, engineering, veterinary science and agriculture.

Women usually do not go in for these courses and prefer general arts courses, in which enrolment for both sexes grew over the 10 year period from 40.4 per cent of total higher education enrolment to 44.8 per cent, even as it declined in the sciences from 25.4 per cent to 20.7 per cent.

Language row prompts board inquiry

from Lindsay Wright

WELLINGTON

Controversy over the use of a language test for overseas students has forced New Zealand's universities entrance board, at the request of Minister of Education Merv Wellington, to suspend its application to some Pacific Island students and to initiate an investigation into its necessity.

The LATOS test (Language Achievement Test for Overseas Students) was developed under contract by the New Zealand Council for Educational Research in the early 1970s as a means of screening out from among the overseas applicants for whom English is a second language, those who have a reasonable chance of academic success.

Debate heated up early this year when initial and inaccurate reports that 13 of the 18 Western Samoan students who had applied for admission to New Zealand universities this year had been rejected because they failed the LATOS test and had then obtained entry to Australian universities.

It later transpired that only three had been rejected on this ground, but the allegation fuelled a bitter and confused debate in which the entrance board came under increasing fire from Pacific Island leaders, New Zealand teachers, university students and university spokesmen.

Now the Union of Malaysian Students in New Zealand, representing the largest group of overseas students who are subject to the test, have joined the call for the abolition of LATOS and for the provision of diagnostic tests which can be the basis for better provision.

Dutch parties consider shorter degree courses

from Lionel Cohen

NIJMEGEN

Political support is building up for Education Minister Dr Arie Pais' plan to cut the length of first degree programmes in Netherlands universities.

The parties in the Dutch parliament have published their formal reactions to the proposal, the first phase of which ahorrans the average undergraduate course from a maximum over-run of six to four years.

The draft law must be debated and approved by parliament this autumn if they are to be brought into effect by September 1981. The attitude taken by the political parties is now of crucial significance and, in spite of certain reservations in the comments now made public, it seems that Minister Pais will be able to count on a solid parliamentary backing for the principle of shorter first degree course structures.

The ruling Christian-Democrat and Liberal alliance is almost united in its support for the plan in spite of the insistence by some Christian-Democrats that the pilots by must still provide guarantees that such a shortening of the study period will not lead to any undermining of academic standards.

The Liberals have no such qualms over their minister's proposals, but the small and increasingly popular centre-liberal D66 party, which last week gained two new seats in the indirectly-elected Dutch senate, has stated its intention of introducing its own modified, draft law proposal on this subject which, though likely to favour the cut in study time, is expected to incorporate better guarantees for part-time and working students.

Principal opposition to the Pais plan comes from the Dutch Labour Party. In 1975 then Labour Education Minister, van Kemenade, had drawn up plans for limiting undergraduate studies to a "normal" duration of five years with much less emphasis on the development of a second, or postgraduate, "phase" of subsequent study which forms a key element in the present draft law.

The party, along with student organisations, is opposed to some of the economic implications of "two-phasing" and particularly of planned restrictions on entry into the second phase, for which the number of places available was originally to be restricted to only 40 per cent of the number of "first phase" graduates.

Minister Pais has already indicated that the proposed "40 per cent rule" may not be strictly applied in practice, but the Labour Party argues that any such restrictions coupled with the cut in study duration are designed to produce economies in higher education expenditure at the students' expense.

Labour's view is that any such savings should be achieved, not through the students, but by reducing the salaries of professors, cutting the number of university staff, and improving the teaching efficiency of those that remain.

The long and the short of the specialist crisis

In the wake of a dour circular from the DES, Patricia Santinelli examines the bleak set of options for the shortage subjects

"A famine in the midst of plenty" are the apt words a Department of Education and Science official chose to describe the worsening shortage of specialist teachers, notably in maths, science and crafts at a time of mounting general surplus and teacher unemployment.

The question of a remedy has been a vexed one. Despite the abundance of "solutions" offered, it is becoming obvious that the shortages which in some cases date back to before the Second World War and appear only now to have reached national crisis proportions, are not responsive to a magic wand.

This was driven home last week in an unusually stern warning from the DES to all teacher training institutions that they must control over recruitment in the non-shortage subjects such as physical education and increase the numbers trained in shortage subjects because of the acute shortfall.

"1979 enrolment data suggest that large number of institutions are considerably exceeding their planned numbers in three/four-year courses in non-shortage subjects, particularly physical education, and falling well below them in the subjects in most acute shortage—mathematics, craft design and technology and above all physical sciences".

The circular says that on present forecasts, the size of the teaching force will be "significantly lower" than the planned output of trained teachers and that this will continue for the better part of the decade.

"Therefore it is of great concern that the pattern of recruitment which has shown a marked divergence from what is required by the schools should be altered. The mismatch should be corrected and teacher training establishments should stop producing large numbers of newly qualified teachers who are unlikely to find jobs", the circular says.

It points out that previous guidance suggested that large groups in some subjects might support small groups in others, particularly shortage subjects, on the assumption that a surplus of non-shortage subject teachers would find employment outside teaching and "cross subsidization" would thus help provide higher education as well as underpinning shortage subject provision. However, recruitment to specialist courses in physical education implying an output of more than 1,000 a year compared to the planned 850 had cast doubt on this strategy.

It recommends that BEd PE courses should have at least 20 students in single sex groups and 30 in mixed groups and that those institutions with groups below that level should consider ending the courses whilst those with strong physical education courses just below the norms should consider increasing their size provided that they could offer a short supply second subject.

Moreover it advises institutions to consider providing opportunities for non-shortage subject students to take a second subject in a shortage subject where staff and resources are available. "They should also consider ending very small subject groups and using staff for other work such as in-service training, and even in the case of shortage subjects rationalization should be considered", the circular says.

This week this latest advice on the mismatch has provided an appropriate background to major discussions between Lady Young and the local authorities' associations on a five-point plan to solve the shortages announced earlier this month by the Minister.

[redacted]

A plan is urgently needed if we are to trust the deluge of sometime confusing figures which have in the last few months compared for attention. There have been those from Her Majesty's Inspectorate, Secondary Survey and its supplementary specifically on maths added to DES and local education authorities statistics.

Some of the most up-to-date figures were released in February by the Secondary Heads Association. They indicated that the shortage of specialist teachers could be between 5,000 and 10,000. The survey, carried out with the Association of Science Education in 1,268 secondary schools and colleges (about 28 per cent) in England and Wales had all the advantages of being back only to November 1979, while DES figures had usually to be at least two years old.

The survey indicated a shortfall of 2,392 teachers (791 in maths, 467 in physics and 654 in CDT).

The figure from local authorities in January 1980 showed that unfilled vacancies in maths amounted to 600, with a similar number for physics and 400 in CDT, all of which represent a substantial increase on 1979 figures.

Moreover, the real figures are said to be much higher because of the existence of unqualified or poorly qualified teachers in these subjects—now referred to as the mismatch. It is thought that there are some 17,000 unqualified teachers teaching these subjects and that some 4,000 maths, 2,000 physics and 2,000 CDT teachers are needed to replace them on top of normal recruitment. Even more confusingly, it is now stated that there are about 23,000 teachers qualified in maths and science who are not teaching these subjects.

It is unlikely, however, judging by the latest figures for applications to both the BEd degree and the PGCE, that the shortages could be solved in the next few years by the influx of newly trained teachers in maths, science or CDT.

Revised plans for 1981-82 according to the DES for third year BEd courses, one year specialist courses and PGCE courses provide for a total of 1,252 and 926 places in maths and physical sciences respectively, implying a final output of trained teachers of 1,210 in maths and 890 in physics.

But overall applications to the BEd in comparison to last year are down by 28 per cent from 14,712 to 10,537, with recruitment to maths currently at 439 and to physics at 40. It should of course be remembered that these figures do not include ones from the eight institutions which recruit through the University Central Council for Admissions.

The position looks marginally better for the PGCE, where overall figures indicate a 6.17 per cent increase in applications over last year from 14,208 to 15,355, with maths applications up from 943 to 1,139, and physics from 361 to 504.

One ray of hope may come from the "plenty" figure of unemployed teachers, said to be near the 10,000 mark by the DES but contested by the National Union of Teachers. The union claims the figure to be nearer 25,000, particularly if you take into account married women trained as teachers but unable to return of the professions through lack of posts.

The latter have a role in Lady Young's proposals to local Government education chiefs. As part of her plan married women with good qualifications are to be exhorted to return to the classroom, even if only on a part-time basis.

But the main thrust of discussions is to centre round incentives such as scholarships to attract young people into shortage subjects, the quality guarantees to those so qualified teachers in shortage subjects who agree to stay on in schools for an unspecified period; higher starting salaries and enhanced promotion prospects for shortage subject teachers, as well as better careers advice, particularly for girls, on the security offered by such posts.

There is little doubt that other areas which might influence shortages, such as better publicity, the Government retraining programme, increased in-service training, contribution from industry and redeployment, were also on the agenda.

None of these measures are new and some have already been applied to an extent, but it is the first time that they have been packaged together as a format towards a solution. This is being interpreted as the first direct attempt by the DES to look at teacher shortages not in isolation, as has happened in the past, but in the hope that together with local authorities some positive impact will be made on the problem.

No shortage of pupils. It is teachers who are not forming a queue for the science subjects.

The local authorities' attitude to the package and to achieving some kind of impact on the shortages is encapsulated in a statement by Mr Gordon Cunningham, education officer for the Association of County Councils.

"More publicity, image building, retraining and secondments are all worth trying, but we could easily get to the end of the 1980s and still have the same problems", he said. "And if we do we shall rightly be held guilty of not having tried."

However, there are bound to be pessimistic reactions in some quarters where even action now may be considered too late, certainly to have any immediate effect on the current shortages, although, any positive move is likely to be welcomed generally.

[redacted]

This dissatisfaction may well be rooted in the background to the present crisis. History shows that, at least for maths, shortages go back to before the Second World War and shortages in maths and to a certain extent physics appear to have been rampant in the 1950s, 1960s and 1970s, with little effort made to alter them.

This stems partly from successive administrations' inaction over at least 20 years. It is highlighted by a DES belief that "things would right themselves", shown to have been disastrously wrong, especially with reference to the late surge in teacher numbers. It was hoped that this would result in the emergence of more specialist teachers.

Essentially the exercise resulted in a diminished supply of specialist teachers but the 1977 survey of teacher numbers and qualifications in secondary schools which might provide more accurate information, although known to be completed, has as yet not been released publicly.

The second main reason for the shortages is seen by many as a fundamental flaw in our education system which has allowed crippling early specialisation and compounded the existence of a vicious circle starting in primary education and coming full circle in higher education where unqualified teachers of maths and science with little ability and even less enthusiasm for the subject pass on their dislike to majority of pupils.

A brief reference to the 1966 Mathematics Survey, which was the first to look at the quality of teaching in the latest DES document which points to the complex reasons for the shortages. "More subtly, there is a vicious circle whereby the shortage of good teachers in those subjects results in too few pupils, especially girls, pursuing them to A level and in higher education, whence the majority of new recruits to teaching are drawn".

Mr Francis Cammaerts, principal of Rolle College, Exeter, says that the real long term solution is to go back to the structure of our early specialization. "The HMI core curriculum requirements indicate that the Government is conscious of this and are prepared to interfere in the wrong way by making certain subjects compulsory until the age of 16", he says.

He added that in all his 43 years of teaching there had always been a shortage, particularly of maths teachers and that we had always had to deal with unqualified or poorly qualified teachers in maths and physics.

"This has its base in the DES's very limited attitude. Now we are facing growing shortages in the humanities as well as in science and technology. To solve this we need to go back to primary education and to approaches to learning throughout the education system", he said.

Mr Norman Payne, principal of Bath College of Higher Education believes that no solution to the shortages can be found without first examining the different characteristics possessed by each subject.

In a detailed list which includes not only the accepted shortage subjects — but also business studies, home economics, music and religion, Mr Payne says that there is at present no shortage of young people leaving school with A level mathematics.

[redacted]

The big question he points out is why only a small proportion of these actually go on to study maths at higher education level and why teacher training fails to attract an adequate number for either the BEd or the PGCE route. Mr Payne wants a DES funded short research exercise to determine the subsequent careers of those young people who achieve A level maths. Hopefully the Cockcroft inquiry into the teaching of Maths when it reports later this year will provide some answers.

The outlook for physics in schools, Mr Payne says, is bleak in the extreme, it having all but disappeared as a specialist subject in BEd degrees and the supply of physics graduates to the PGCE being low.

So it would seem inevitable that physics teaching will in the future be taught in the context of more generalised science courses and by teachers not primarily qualified in the physical sciences, thus further reinforcing the low uptake in the subject.

Undoubtedly Lady Young's proposals will have little impact on the needed overhaul of the education system, but they are likely to lead to some qualitive and quantitative changes in the shortage areas, though probably not without some opposition from certain quarters.

The introduction of £750 a year scholarships on top of normal grants is bound to be popular in all sectors. The local authorities are known to favour a student loan scheme, while institutions and students, the two direct profiteers of such a scheme, and the teaching unions, could only welcome it.

The offer of higher starting salaries for shortage teachers is bound to be regarded as divisive by the NUT, but it has the advantage as a scheme of already having been condoned by the teaching profession, since many specialist teachers are on higher increment scales than their colleagues in other subjects.

The suggested scheme would mean immediate appointment at Burnham Scale 1, and the financial loss would be small since it is expected that if these teachers stay on any good they would be rising up the scale quite quickly.

Dr William Cockcroft who chaired the inquiry into maths teaching only recently told the Mathematical Association meeting in Durham that he was sceptical that more competitive salaries would attract more graduates.

One subject for certain discussion is bound to have been the Government's retraining programme for teachers who wish to train and retrain in shortage subjects. This has been described by some as disappointing and ludicrously small.

Yet although there are many colleges keen to put on these courses so far there are only twelve doing so, the DES is said to be again saturating the market, although it seems obvious that expansion in this area might provide one of the more effective immediate solutions.

Ms Alison Shrubsole, principal of Homerton College, Cambridge, recently questioned the temporary nature of the programme which is to go on until 1983.

"In view of experience over the last 20 years can we be so sure that there will not be shortages in some or others, in the years ahead", she said. And at a time when the rate of change is accelerating can we really expect teachers to pursue careers of up to 45 years without the need for some radical change in their knowledges and skills.

Better publicity and careers advice will probably have pride of place of the discussions too. The need for some urgent revision is highlighted by the decision of the University Council for the Education of Teachers to send out a letter in autumn to third year mathematics and science students telling them that teaching in these subjects offers them a good career ahead, following the discovery that the civil service was advising students against entering the teaching professions regardless of their qualifications.

Other parts of the discussion will have covered the use of industry released staff, of foreign specialist teachers and even recommendations made by Mr Neil McFarlane, Junior Minister at the DES, that Isaac Steel's redundant employees should be retrained as craft teachers.

There is however little evidence that a full discussion of initial teacher training, excepted for the recent circular, would have taken place, with the local authorities. This is in spite of the needs for changes highlighted by the full secondary survey and its important in any long-term impact on the shortages. Hopefully it will be one of the main considerations of the Advisory Committee on the Supply and Education of Teachers when it first meets in September.

Another and now no longer so remote development is the microchip. Increasing applications in the area will lead to a high demand for good maths and science graduates by industry at the same time that the teaching profession needs to double its numbers in that area to ensure that we have a population able to cope with the microchip ridden age.

The amazing Cobb

Peter Scott concludes his series on eminent historians with Richard Cobb, a man of limited period but universal appeal

PROFILE

"L'éternant Cobb" is how a French newspaper once described Professor Richard Cobb, professor of modern history at Oxford, fellow of Worcester College, and historian of revolutionary France. The French have many ways to describe the English but "amazing" is rarely one of them. It comes too close to being a compliment.

Yet the phrase manages to capture the peculiar and occasionally breathtaking quality of Richard Cobb his individuality, his idiosyncracy (which has never quite lapsed into eccentricity), his conviviality, his energy. For he is not only an academic historian whose excellence has been acknowledged by the French historiographical establishment, a difficult accomplishment for any English historian and doubly so for one who admits that he finds most issues of *Annales* unreadable; but also writer of exceptional quality who has been described by a fellow historian as "the Goya of our craft."

This comparison with Goya does no justice to Cobb's good humour and optimism but it does underline the compelling vividness of his writing. In him the historian is artist as much as scholar. But it is much too simple to suggest that Cobb is a novelist *manqué*, although he much admires Simenon and his great ability to recapture a sense of place and period, and Anthony Powell is a great friend. Nor is it enough to relate his skill and success as a writer to his strong belief that history must be a popular subject that attracts a general readership and not be the property of professional cliques.

Cobb makes few concessions to ease and accessibility in his books. He rarely translates quotations from French and is addicted to lengthy (but fascinating) footnotes. Yet his style soars above these apparent disabilities. The reason for this is as simple as it is fundamental to his conception of history.

For Cobb history is about people. He sees no patterns, has no theories, and makes no judgments that might undermine the humanity and the exuberance of his history. His only real bias appears to be to feel sympathy for roguish individualism (the *sans-culotte*, the common soldier, even the bandit) and distaste for the powerful, the puritan, and the fanatical (all qualities embodied in the character of Robespierre).

His pure view, almost vision, of history not only saves him from the bloodless jargon which historians who value their insights of sociology or anthropology are forced to adopt, but contributes to the humanity of his many books, packed with detail, anecdote, incident.

It also helps him to produce a very egalitarian history. At the end of *Death in Paris 1795-1801*, a quintessential Cobb book published two years ago, he writes of the suicide victims, he has studied: "The *suicides* and the *suicidées*, though they leave us nothing save the inexporable fact of their gesture and the summary decencies of their tattered and darned clothing, are as much mute chroniclers of their times, in the dreadfully repetitive record of their failures, as those who kept diaries, who wrote letters, and who had sufficient self-confidence to feel that their *faits et gestes* were worth handing down to posterity. Failure is much commoner than success, at any period, though it has seldom been accorded even a small corner in the work of historians; it is also more endearing, and much more human."

Richard Cobb was born in 1917, the son of a Sudan civil servant. His passion for history first became apparent when he was very young, and two important elements in his approach to history, his enthusiasm for foreign history and his commitment to a regional, or even local, rather than national perspective, also appeared when he was still at school.

He was educated at a preparatory school near Crowborough and at Shrewsbury, and it was at the first of these that his ambition was first formed — the rage of 12. Fifty years later he can remember two motives. The first was that history offered an escape route from a humdrum England into an exotic foreign world.

The second was the influence of his mother. Dora Swindale, the seventh child of a country doctor, had gone as a teacher to Bloemfontein in the bitter aftermath of the Boer war and there discovered an enthusiasm for the Dutch. Through this enthusiasm the young Cobb was introduced to Motley's *Dutch Republic* with its high-minded, noble, and protestant view of history. This book was the first historical work that deeply influenced him.

At Shrewsbury Cobb encountered, through a brilliant temporary history teacher, the work of Namier which again had a profound effect on his approach to the subject. Namier's debunking of not just Whig history but of a whole style of political history that emphasized in Bagehotian terms "dignified" rather than "efficient" events and his concentration instead on the minutiae of the selfish politics of local gentry were an important element in stimulating Cobb's lifelong enthusiasm for regional history and fascination with the very detailed incidents of personal lives.

He left Shrewsbury early having won a postmastership (scholarship) to Merton College, Oxford, and having also become on his own admission a disciplinary problem. It was during the nine months between school and university that he discovered France, largely by accident. His father was opposed to the idea of spending the time in Germany, more because he had been told all Germans were homosexuals than because of any profound dislike for the new Hitler regime. So Cobb was sent instead to Paris through the medium of some bridge-playing friends of his mothers' who lived in Tunbridge Wells.

In the following crowded few months he revelled in the liberating atmosphere of Paris, plunged into "disorganized reading" at the Bibliotheque Mazarin, decided after reading a popular, partisan and Robespierrist history that the French Revolution "was my thing", and learnt the impeccable French of which he is still so proud. He spent almost half of each of his Oxford years back in Paris, and when he finished his degree in the summer of 1938 he went straight back to France and remained there until the outbreak of war.

Cobb's war, after some initial difficulty over joining the army because of poor health, was spent first in the occasionally comic-opera world of Vichy with foreign military missions so well described by his friend Powell. His contact was mainly with the Poles (whom he taught in Blackpool in his first war work before joining the Army), and Czechs (in Kettering). In are army capable of sending Turkish speakers to liaise with Norwegians he was not sent to liaise with the French.

Soon after D Day he was back in France, touring the villages of Normandy assessing compensation for war damage with their mayors. Later, he was moved to Brussels and finally, but only briefly, to Germany. At the end of the war he was granted special permission to be demobilized in France rather than returning to England. He went straight back to Paris, eventually to an apartment with the romantic telephone number DARTON 71.48 stirring the memory of old revolutions, and spent the next ten years in France as a peripatetic scholar without roots and often on the move.

Until the end of 1955 Cobb occupied himself as, in his own words "a compulsive archival historian", getting by on the proceeds of part-time jobs (teaching English to *Air France* employees was one) and a small CNRS grant and so under the ultimate direction of the French historian, Georges Lefebvre. To gather the material for his various books on the armies of revolutionary France, he visited more than half the *départements* of France, spending a long time in Lille, Rouen, and Marseilles, and missing out only one region of France, strangely, perhaps the south west with its historical links with England.

During this period he discovered France in two ways—through "the extreme curiosity of archival eavesdropping" he accumulated in both detail and in depth a perhaps unique appreciation of French society in the 20 years following the revolution, and through his discovery of post-war France by working in a hundred village and town archives he acquired an understanding of the French that can be almost uncannily penetrating.

This academic tourism was not without its lighter moments. Cobb still remembers the stares his black-suited figure provoked from the semi-nude bathers of St Tropez as he went to work in the municipal archives. By temperament a northerner—he prefers the industrial north-east and Normandy and dislikes Mediterranean France—he survived hot summers by working in cool and quiet archives.

In the middle 1950s his wandering came to an end. He had lived a bachelor in cheap rooms, for almost 20 years and been warned by Lefebvre that he would "end up on straw". So in 1955 he was offered, on the secret prompting of Lefebvre, and accepted a lectureship at Aberystwyth.

He found his first month in the small town on the Welsh coast in the ebb of summer "brutal" but remembers that after six weeks he went to a local fair with some of his students and cheered up. He found rather to his surprise that he immensely enjoyed teaching. In particular the histrionic potential of lecturing to 200-odd first-year students in a barn-like hall appealed to Cobb who developed a knack for mildly demagogic jokes he has never lost.

Although he kept up his summer visits to France, he came to enjoy teaching more and more. After years of solitary archival research he decided that contact with students did him an immense amount of good. He particularly enjoyed drinking in the town's hotels and bars (he was banned from some) with the students, predominantly Welsh and reminiscent to him of the French with "their egalitarianism and their closely observed malice".

In 1958 Cobb left Aberystwyth for Manchester—"a huge, anonymous, but likeable university." He spent two years there as Simon research fellow and it was in Manchester that he wrote up his two-volume *Les armées révolutionnaires*: the product of his long years of delving in French provincial archives (two more detailed regional studies of the Revolutionary armies had appeared in the 1950s). In 1962 he spent one brief and not entirely settled year as a lecturer at Leeds.

Finally in 1963 he came back to Oxford, this time to Balliol as tutor in modern history. He admits that he felt guilty to re-enter such a privileged world and has never quite lost his affection for warm industrial cities like Manchester, Leeds, and Lille. He became reader in French revolutionary history in 1969, and professor of modern history in 1973 (and switched colleges to Worcester at the same time).

On his return to Oxford Cobb felt an ambivalence which he has perhaps never quite lost. On the one hand he was impatient with what he regarded as obscurantism, in particular the long resistance to the idea that French literature and history might be studied together ("It was a Balliological tradition that modern languages were bad for Balliol people"). On the other hand he was frankly grateful to be able to teach "some very bright Etonians."

Today looking back he is grateful to Oxford for two things. The first is that it has provided him with very bright graduate students whom he can infect with his enthusiasm for France. His students have been an eclectic group in their ideologies and interests; the only thing they have perhaps shared is Cobb's enthusiasm for regional history, an enthusiasm he has fostered by running what amounts to a one-man travel agency ("I am always trying to get someone to go to Little but they all move south", is his rueful comment).

The second is tutorials. "Lecturing in a great bull ring of a lecture theatre can make you lazy. Tutorials are good for one's humility. Clever students can always come back at you", he explained. Today he laments the fact that he has only three graduate students and that colleges are reluctant to send undergraduates to him because they cannot afford extra-collegial teaching. "I take all the undergraduates I can get. They can pay me in drink if they want."

During the 1960s and 1970s Cobb has produced a stream of books, all highly praised but none perhaps as substantial as his original work on the revolutionary armies. Most have been collections of essays and on the years 1790 to 1820 (with a heavy bias towards the first of these three decades). Two, *A Sense of Place* and *Tour de France*, have been slighter, more personal but also perhaps more fascinating books. Together with these books, have come academic honours—a visiting professorship at the *Collège de France*, the Raleigh and Zelnorff lectures, membership of the *Ordre National du Mérite* to add to the *chevalier des palmes académiques* won at an earlier stage in his career.

Yet despite these honours and accomplishments Cobb remains unaffected by historical modishness, French or English. He believes strongly in the older French tradition of amateur historiography by the local doctor, priest or vet. He also believes that history can only survive by being a popular subject. Far too much history today is too technical and "scientific", and dominated by cliques of patrons and clients for the anarchic Cobb.

He is also suspicious of the supposed insights that the newer social sciences can bring to history. "Quantification" is a particular enemy. In the *TLS* in 1971 he wrote: "The study of elections is a useful reminder that, even with the most up-to-date instruments to hand, history is still liable to bite the scientific, rubber-gloved hand that is attempting to discipline it. Personally I find such accidents most reassuring."

Demography he is just about prepared to accept. But anthropology he dismisses as "meddling", and his most bilious condemnation is reserved for sociology—"the antithesis of history, a detestable and deplorable subject which will destroy any historian who gets involved with it". He also admits that the pity, class, bores him and that he finds it difficult to become interesting in the rising or declining gentry.

Cobb is a Janus-like historian. On one level he is rather limited, on another he has an almost universal appeal. He is limited in period because he really only writes about the chaotic decade of the 1790s. Napoleonic France holds fewer attractions for him and he candidly admits that with the 1820s and 1830s and the coming of the railways his interest in history evaporates. His feeling for France, profound as it is, is also perhaps limited. Just as Cobb the historian prefers the 1790s to the rule of Napoleon, so Cobb the man seems more at home in the France of the Third and Fourth Republics than in the technocratic France of President Giscard.

His critics, who are few and almost entirely benign, also point out that Cobb's history for all its vibrancy has no shape, that it displays almost no feeling for the wider and deeper currents of human society. This they would attribute to his lack of interest in theory. At its harshest—but almost paradoxically its most complimentary—this criticism would suggest that his books must be judged not by intellectual standards, but by the standards of literature.

All of this must be true—But it is not sufficient. Cobb belongs to no historical school. Although the most gregarious of men, as a historian he is almost a loner. His formative years were spent on a solitary odyssey through the archives of provincial France, not in a history department in a British university or as the client of some French academic patron. So to judge him by the occasionally cramped standards of academic historiography is not always appropriate.

Today Cobb, the most famous historian of revolutionary France, believes that the Revolution was a terrible disaster and admits that he is very frightened by political violence. Yet this personal belief has never stood in the way of his faithfully recording the experience of the common people of France during the revolutionary years. Some may puzzle over the morality of this apparent contradiction. Others, the certain majority, will see in it his devotion to a deeper morality, that of preserving the truth and integrity of the past.

There are many adjectives that can be used to describe Richard Cobb and his history — individualistic, anarchic, eclectic, humane. But the last remains the one chosen by that French newspaper — the amazing Cobb.

Mr Carlisle's trip to Colombo (left) will be anything but a holiday.

Carlisle in the dock over fees

John O'Leary sets the scene for the Commonwealth Education conference in Sri Lanka

Mr Mark Carlisle, Secretary of State for Education, will be flying out of the frying pan into the fire when he goes to the eighth Commonwealth Education Conference, which starts next Tuesday in Colombo, Sri Lanka.

Far from finding the conference a relief from the pressures of constant criticism and lobbying over cuts, he seems certain to face another barrage of complaints, this time from his brother ministers, on overseas students' tuition fees. The issue which has dogged Mr Carlisle both in and out of the House of Commons is bound to become the focal point of the ministers' three days of talks.

Indeed, with the North/South debate dominating Commonwealth affairs, the fees issue could turn the eighth conference into the most overtly political yet. The meetings, which started at Oxford on 1959, have a tradition of informality and constructive discussion free from predetermined political lines.

Although the Commonwealth Secretariat is anxious to maintain this atmosphere, the developing nations have signalled their feelings on the question of fees for their students in Britain. Mr Carlisle received a letter in April making these plain following a *meeting of High Commissioners* and other national representatives.

A record of the meeting stressed "shock and concern over the recent increases . . . and found regret that there had been no prior consultation with Commonwealth representatives. Several of the High Commissioners told of the damaging effects which the proposed increases would have on their countries' educational development and manpower training programmes."

The report of the meeting concluded that: "Traditional links between Commonwealth countries and Britain had meant that much of their elite, particularly, especially, those of their political, professional and administrative elite, was provided in the United Kingdom.

"It was not far-fetched to expect that the pattern of leadership in Commonwealth countries would change with possible consequences for the future, if higher education was to be largely obtained from non-Commonwealth countries. The proposed fee structure would make this evolution of Commonwealth links inevitable."

There has never been a debate specifically about fees at a Commonwealth conference, although discussions on the promotion of international student mobility—a long-standing aim—have inevitably taken fees into account. This time, however, Sir Shridath Ramphal, the Commonwealth Secretary-General, has promised a full debate and the Secretariat has produced a six-page report on the situation facing overseas students.

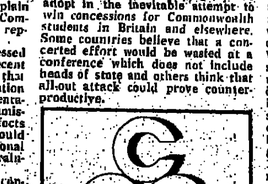
Britain will not be the only nation in the dock when fees are debated, although it has to more than 43,000 Commonwealth students last year its policies are seen as the most significant. Singapore has a 50 percent surcharge on tuition fees for foreign students, some Nigerian universities have a fee differential, and even the University of the South Pacific has a "territorial contribution".

But it will be the four leading white nations which attract the most criticism. Only Britain is to charge so-called full-cost fees, but in Canada half of the country's provinces are introducing a surcharge of more than £500 for overseas students, in Australia fees of up to £1,000 will be levied for the first time and in New Zealand the fees for foreigners are to rise to about £700.

Resentment over Britain's fees shows over in the papers submitted by the individual nations outlining their own educational provision. Cyprus's paper says: "Greece United still further the number of university places normally allocated to Cypriots, while Britain increased fees to such high levels that only the very, very rich indeed will afford to send their children to Britain for their higher education in the foreseeable future."

Not surprisingly, Britain makes no mention of overseas students' fees in her paper. British delegates are anxious that the issue should not dominate the conference to the exclusion of other important topics and will presumably try to limit the time given over to debating it.

Apart from Mr Carlisle's response, the only imponderable is what tactics the developing nations adopt in the inevitable attempt to win *concessions for Commonwealth students* in Britain and elsewhere. Some countries believe that a concerted effort would be wasted at a conference which does not include heads of state and others think that all-out attack could prove counter-productive.



There will be no shortage of mitigating schemes on the table for those who want to stop short of a scheme for equal fees within the Commonwealth. And, with recognition of each state's rights to set policy within its own borders already accepted, one such scheme—or a combination of features from several—would seem likely to be the favoured option.

Leading the contenders are the Council for Education in the Commonwealth's proposal for a higher education convention and the Association of Commonwealth Universities' plan for *special student visas*.

Under the convention, a multilateral agreement would link fee levels for Commonwealth students to "home" levels in each country, setting an agreed maximum additional percentage. National representatives would meet again to agree the details of a convention, which would aim at liberalization rather than standardization and would not only restore reasonable charges but also improve access to higher education through extended reciprocal arrangements. The proposal has been circulated to a dozen countries.

The ACU proposal is modelled on new arrangements in Australia, whereby students are charged for special visas rather than facing differential fees. The institutions see an advantage in placing the responsibility for increases squarely on governments, but would want to safeguard their rights over selection and to see an agreed limit of charges.

However, eliminating the fees debate [illegible]

Peter David reports on the campaign to make defence acceptable

Winning the military studies war

Had it been made ten years ago and not last week, the announcement that Cambridge University was accepting Ministry of Defence money to appoint two defence fellows would have been greeted with hoots of student outrage. When the ministry first entered the business of funding academic appointments in the 1960s, its activities were denounced by Anthony Anthoaster, a founder of the Campaign for Academic Freedom, as a sinister intrusion.

A similar response today is far less likely. There has been a stark change in the general political mood, and public attitudes to defence have become increasingly realistic (or cynical). But another reason for the growing acceptability of military studies is that the fledgling discipline has been carefully nurtured over the past ten years, and is now a familiar if curious feature of the university landscape.

Interest in the subject dates back to the immediate aftermath of the Boer war. The disappointing performance of the military led Manchester and Oxford universities to appoint academics to study the history and profession of arms. But the subject only took off in earnest in 1967, when the Ministry of Defence decided to sink substantial amounts of money in the appointment of defence lecturers at a number of universities around the country.

Creation of the defence lectureship scheme has been attributed to an initiative by Denis Healey when he was Secretary of State for Defence. Forging closer links between the ministry and the universities, and augmenting the intellectual rigour of defence planning, chimed with the technocratic optimism of the first Wilson Government.

Five universities—Oxford, Kings College, London, Southampton, Aberdeen and Edinburgh—participated in the first round of the scheme. But they made it plain that they expected maximum freedom in the selection of academics and disciplines. As if to underline the universities' determination to maintain a proper academic distance, one of the very first jobs went to a historian, Michael Howard.

Looking back on the defence lectureship scheme in a recent review, Martin Edmonds of Lancaster University said the scheme had proved highly successful. Four of the original five academics appointed under it had received their full 10 years' MoD funding, and two—John Erickson at Edinburgh and David Greenwood at Aberdeen—had become directors of defence studies centres financed by their own universities. Later additions to the scheme brought in Lancaster and Leeds universities.

Last week's announcement that Cornelli Barnett and Philip Anthony Towle would be becoming defence lecturers at Cambridge is evidence of the MoD's view that the scheme is worth the substantial financial investment. The extension of the scheme to Cambridge certainly confirms the growing respectability of defence studies and the consultation of its institutional base. But although the Government has succeeded in putting defence studies on the academic map, there is still considerable confusion in the minds of both laymen and cognoscenti about what issues the discipline should concern itself with.

The picture that emerges from Martin Edmonds' review of military studies in the United Kingdom is one of numerous scattered individuals pursuing parallel interests but seldom converging either intellectually or institutionally. Precisely because the universities were sensitive to the charge that they were permitting MoD intrusion, the lecturers appointed under the Healey scheme tended to focus on their own specialisms, which could include support for new educational projects in the poorer countries and proposals to increase the number of Commonwealth scholarships. Yet the free issue which seems set to cause the greatest [illegible]

politics. The disciplines bundled together under the military studies umbrella grew in the second [illegible] to incorporate international relations and even—in the case of Barrie Paskins at Kings College, London—philosophy.

This diversity has succeeded in allaying fears that the university might become hosts to a politically oriented discipline accepting the ministry's aims and philosophy of Britain's defence community. But there is no doubt either that, together with a number of independent research institutes, the university defence lecturers have created a close network of scholars producing a wide range of defence-related studies.

At the University of Manchester Edmonds points out in his review department of military studies has established considerable expertise in revolutionary and subversive warfare. At Edinburgh, the work directed by Erickson has spanned Soviet military studies, arms procurement and public attitudes to defence. Research interests at Aberdeen include the arms trade and UN peacekeeping. Kings College, London, has interests in military-civil relations and enjoys close links with the Royal Naval College, Greenwich.

Mr Healey: helped create the scheme.

The work of the university [illegible] moreover, is complemented by numerous independent institutes devoted to defence studies which [illegible] more or less applied flavour. By far the most influential is the International Institute for Strategic Studies, founded in 1958 by Alastair Buchan in an office off the Strand. It acts as a publishing house for both officers and academics in many countries. Others include the Royal United Services Institute and Chatham House, which only slowly strays from its primary interest, international diplomacy, into specific defence questions like the role of a British deterrent.

It is therefore undeniable that Britain has succeeded over the past 10 years in building up a sizeable defence studies establishment, albeit on a much smaller scale than in the United States or France. More questionable is the ideological stance of the academics involved in it. Several of its servants who participated in the original decision to set up the defence lectureship scheme claim that their intentions were more evangelical than [illegible] they wanted to increase public awareness of defence issues rather than create university posts which would help [illegible] specific strategic problems.

Over the years, on the other hand, many of the academics involved in military studies have indeed developed an interest in policy-related problems and have done research commissioned by the defence establishment. Growing interest in the machinations of the "security" and a resurgent campaign against nuclear arms, could make this [illegible] unpopular. But there is no doubt that military studies are here to stay.

One supporter, Corpus Christi's Hew Strachan, wrote recently: "The development of existing trends . . . could enhance the value of the British university system and the profession of arms and could invigorate the army more closely with society. Thus, rather than leave military matters to an isolated group of professionals, they would be brought into the market place and forced to justify their views against the preconceptions of the [illegible] cognoscenti. Rather than challenge the liberal values of a university education, war studies would use them than."

Michael Biddiss recalls the work of the German historian Oswald Spengler, who was born 100 years ago

Purveyor of harsh prophecies and poetic truths

Those who preach with enough arrogant confidence will usually find a few to listen. The most remarkable thing about Oswald Spengler was his ability to gather so large an audience so quickly. He shot to fame at the end of the Great War, having published during the summer of 1918 the first half of a weighty historical treatise entitled *Der Untergang des Abendlandes*.

As a contribution to global history, this was a work breathtaking in its range and in its dogmatism not only about the patterns of the past but also about the way ahead. The arguments backing Spengler's doom-laden prophecies generally received short shrift amongst academics. Yet, despite opaque prose, the book got an astonishingly enthusiastic response from a wider public. By 1922, when the remainder of the survey appeared, Spengler was already something of a cult figure in his German homeland and even beyond. An English version of his volumes came out in 1926-28, since when there has been a fairly persistent demand for the work of this gloomy oracle.

The latest reprinting of *The Decline of the West* coincides appropriately with the centenary of the author's birth. A native of Blankenburg in the Harz mountains, he was the son of a Protestant mining engineer who had later become a postal bureaucrat. Spengler went to school in Halle before attending university there and in Munich and Berlin. Though his main fields of study were mathematics and science, a doctoral dissertation on Heraclitus suggests the diversity of his interests. He was a school master until 1910 when, supported by a small legacy and occasional fees from journalism, he opted boldly for the life of a private scholar. Spengler was determined to hasten on with an analysis of the crisis in Western civilization which he believed to be imminent. To some extent, events overtook him. The *Decline* stood out in draft when general hostilities began. Deemed medically unfit for military service, Spengler put all his energies into his text. The resulting work became, quite explicitly (in the German edition anyway) his contribution to the national war effort.

Spengler was intellectually omnivorous, and a vast range of reading underpinned his venture. He acknowledged, however, two especially important debts. The first went to Goethe, as master of method. Spengler took more seriously than most the great poet's claims to stature as scientist as well as writer. He drew most inspiration from Goethe's typically romantic impatience with any study of nature which remained merely analytical and distancing, and which thus failed to elicit the deeper realities of an underlying structure and of those harmonies existing between scientific and other developments. Spengler's other outstanding mentor was Nietzsche, as an incomparable scourger of contemporary complacency. The *Decline* reflected at many points such Nietzschean themes as the idea of decadence, the will to power, the contrast between Apollinian and Dionysian ideals, and the concept of eternal recurrence.

Spengler welcomed the fact that Nietzsche—alongside such allegedly lesser figures as Stirner, Ibsen, Strindberg, and Shaw—had assailed 19th century certainties with the strong arm of cultural scepticism. The endorsement of this assault found in the *Decline* places its author firmly among those engaged in that "revolt against positivism" which stands near the heart of Europe's cultural revolution in the age of Freud and Bergson, Proust and Pareto. The revolt has been chronicled best by H. Stuart Hughes, both generally in his classic *Consciousness and Society* (1958) and with more individual and unusually sympathetic reference, in the monograph entitled *Oswald Spengler: A Critical Estimate* (1952), which remains a fine introduction to its subject. According to Spengler himself, Nietzsche and others had already accomplished much good groundwork by their negative questioning of received ideas. But now was the time for real affirmation—from a historian confident that he could see, in every direction, far beyond the limited horizons of his own epoch.

In order to convey this wider vision Spengler rejected as merely parochial the standard Western historiographical framework, based upon ancient, medieval, and modern periodization. He made the far from unjustifiable complaint that many aspects of past development remained obscure through being distorted so as to fit this particular structure. Unfortunately he then carpentered together an even more formidable Procrustean bed of his own upon which facts might be tortured. Spengler's basic units are "cultures", of which eight feature in substantially developed form within the *Decline*. These are the Egyptian, Indian, Babylonian, Chinese, Mexican, Apollinian (Greek and Roman), and Magian (broadly Islamic) cultures, together with the ominously named Faustian version which has dominated the past millennium of the West. Each of these cultures is largely self-contained: it is little influenced by the others, has little understanding of them, and possesses its own very distinctive spiritual orientation. The historian's task is then defined as being an investigation of the "comparative morphology" of these units, with a view to elucidating the rhythms and laws governing their fate.

Spengler rejected the widespread notion of history as a linear and progressive development. For him the essential movement went not onwards and upwards but in circles. "Cultures", he declared, "are organisms, and world-history is their collective biography." Following its birth (a topic about which Spengler preferred not to speculate) which he believed to be imminent. To some extent, events overtook him. The *Decline* stood only in draft when general hostilities began. Deemed medically unfit for military service, Spengler put all his energies into his text. The resulting work became, quite explicitly (in the German edition anyway) his contribution to the national war effort.

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Stephen Prickett looks at why so many literary figures have rejected their formal schooling

Dissidents who kicked out at a Rugby heritage

There are two ways of telling the story of our education. The first is in terms of content: what we were taught and how. The second is in terms of personal growth. Our conventional wisdom assumes that, with luck and good management, the former promotes the latter. We grew as people by acquiring knowledge.

But the moment it is put like that we become aware that something has been left out. Certainly part of our growth is connected with knowledge. The study of literature, history, languages, philosophy, or even mathematics and science draws from us personal responses. Assimilation of the most trivial information is an active, not a passive process. All that we have encountered becomes part of ourselves. But, granted all that, there is still an unaccounted personal element. We do not learn in a vacuum. The influence of teachers, friends, even chance encounters with books are no less important. Beyond that is the process of socialization. A school or college is a community.

It is not just *what* we learn in our educational institutions, but the framework of values in which that learning takes place that is important. That, at any rate, has been the theory behind English education ever since Thomas Arnold set about fulfilling his former provost's prophecy to the trustees of Rugby School in 1828 that, if they were to make the 33 year old tutor of Oriel their new headmaster, he would "change the face of education through all the public schools of England".

It is not always so. When we are dealing with real people there are bound to be exceptions. But such exceptions surely only prove the rule. Take the case of John Stuart Mill. In his *Autobiography* he describes how he started learning Greek, arithmetic, and history at the age of three, Latin at eight, logic, philosophy, and a "complete course of political economy" at 13. At the age of 20 in 1826 he entered a severe and prolonged "crisis"—what we would nowadays probably call a breakdown—which was followed by a period of depression that did not lift until he began reading Wordsworth in 1828.

Now, it is clear that what we might call his personal growth did not really begin until this time of "crisis". It was only with the failure of learning to provide adequate goals that he really began to struggle with the fundamental questions of what people live by. In Mill's case, what looks like an exception to the Arnoldian rule turns out to be just the reverse. We see, we discover, not sent to school at all, but taught at home by his father. To keep him from misguided conceit, the young Mill was brought up a preternatural little adult, isolated from other children. In other words, Mill's fate seems to illustrate quite dramatically the importance of that communal framework of values in which we learn. Had young John been fortunate enough to go to Rugby 10 years later all would doubtless have been well.

Before we close his file it is worth looking at what actually brought Mill through his crisis. It was, he says, the poetry of Wordsworth. It was not Wordsworth the "nature" poet, but Wordsworth the poet of human feeling that affected him. Though *The Prelude* was not published for another 22 years, it is obvious reading between the lines that there were sufficient hints in the published poetry for Mill to recognise the symptoms of a breakdown very similar to his own. With the failures of his love affair with Annette Vallon and his hopes for the French Revolution, Wordsworth had reached a point where "everybody neglected his values and so demanding proof in everything, he had lost all feeling of conviction".

Though Wordsworth had received hardly any public education by contemporary standards at Hawkshead Grammar School and then Cambridge, it had contributed little or nothing to his inner development. It was the influence of his sister, Dorothy, who had little formal education, and Coleridge, who had actually run away from Cambridge to enlist as a dragoon, that eventually restored him. Would history have been different if Wordsworth and Coleridge had been to Arnold's Rugby?

As we read further accounts of nineteenth century educations a certain disquiet begins to creep in. We were prepared for a minority of dissidents; (a) education system, least of all that of Victorian England, was perfect. The Romantics we can, of course dismiss. Wordsworth and Coleridge are too early. Shelley, hounded at Eton and sent down from Oxford, was clearly a misfit anywhere. Autodidacts like Peacock at the beginning of the century, or Joseph Wright, first professor of comparative philology at Oxford, near the end, are liable to appear in any age. Dickens' unfortunate experiences merely illustrate that an Arnoldian education was only for the rich. Carlyle does not count because he was a Scot. George Eliot, the Brontes, and Mrs Gaskell do not count either since they were *women*. Newman was an unstable sort of fellow anyway—or he would not have become a Catholic like that. But the list of special cases is becoming embarrassingly large. *Somewhere* there must be the main stream, the "norm" from which all these unfortunate deviants were deviating.

Surely, if anywhere, we are on safe ground with the Cambridge Apostles, that exclusive society of Coleridgeans who self-consciously assumed the mantle of the clerisy? We turn to Tennyson, dogged by madness and melancholia in his family, loathing his school, loathing Cambridge even more. Finally forced by Hallam's death to recognise how shallow were his received values. We think of Maurice and Sterling refusing their degrees. Nor is closer acquaintance with the experiences of the other Apostles reassuring. Similarly twentieth century accounts of education do little to redress the balance as the Arnoldian ideal was spread and diffused throughout the educational system. C. S. Lewis's tortures in minor public schools can be paralleled by D. H. Lawrence's humiliations in the state system.

But what about Dr Arnold's successes? Surely there are glittering prizes on the other side of the picture? Probably the Doctor's own brightest hope was Clough, who went from being an exemplary head boy at Rugby to a scholarship at Balliol College and finally a fellowship at Oriel. As a recent biographer has observed, he never seemed to recover from the stamp of Arnold's approval. He gradually lost his faith, published some good minor poems, and died a disappointed man.

How unfair is all this? Most of our examples, admittedly, have been famous writers. The fact that genius cannot be confined within a system does not, merely, invalidate the system. What about the tens of thousands of good, honest, hard-working, sensitive, intelligent beings who *were* nurtured by this uniquely close association between learning and personal development fostered by the best schools? Is it not likely that it would be the misfits who would leave us the most graphic accounts of their educations, and the successes take them for granted? Perhaps being a misfit is a stimulus to becoming a writer?

All that is plausible. But evidence confirms our subjective impression of the extraordinary way in which so many intelligent English men since Arnold's time have come to reject their education. Doubtless these dissenters are a tiny minority among gathering of Old Boys at a school reunion should exposure, those who feared the school spirit was dead, but the mere fact that this minority includes so many thoughtful and articulate figures should make us at least willing to listen carefully to its voice. It might be interesting.

From top left, clockwise: Alfred Lord Tennyson, John Stuart Mill, William Wordsworth and Cardinal Newman.

Mark Pattison has described the shattering effect of the Rugby men on unreformed Oxford. Gracefully conscious of their scholastic and moral superiority over both fellow undergraduates and dons, they rapidly terrified the academic world into desperate imitation. Though Arnold did not invent it, Rugby in the 1830s and 1840s was the high-water mark of this peculiarly English ideal. In his words, its aim was "first, religious and moral principle; secondly, gentlemanly conduct; thirdly, intellectual ability". In the long run the Arnoldian concept was to transform not merely the public schools, but the entire national system of education—and even the English language.

For us today the word "education" is value-laden in a way that the apparently corresponding words in other languages are not. Thus the German *Erziehung* describes merely the system of instruction; if we wanted personal growth we should have to use *Bildung*. The two words are unconnected. Similarly, in French neither *éducation*, nor *enseignement*, carries the massive moral freight of the English. Moreover, those English critics most vociferously hostile to the public school tradition are no less dominated by the Arnoldian belief in education as a value-charged activity. The essence of their criticism is usually *moral* rather than academic. It seems now impossible for the English to think of learning except in moral terms.

There appears to be a fundamental difference between English and Continental experience. The vehemence with which so many of the English dissidents attack the shortcomings of their educations is significant. There is nothing new about inadequate education, and it was certainly not confined to England. The fact is the English had a quite different set of *expectations* from it. Continental accounts have a totally different atmosphere. Rousseau's adolescence was stormy enough, but his clashes were with people: he wasted no time on the *system*. Unlike his own approach in *Emile*, it had no pretensions to provoking personal development and he didn't expect it. Rudolf Steiner, also the propounder of value-charged educational theories, when he looks back upon his own childhood assumes a clear distinction between human values and the academic curriculum. His clashes were with his father.

Much more dramatic, of course, is the story of Kafka, whose struggles with his father were to be a lifelong obsession. Whereas the contents tended to discover their individuality and values through conflict with *people* in authority (usually a father), Englishmen tend to discover theirs through conflict with institutions (often their school). The two most glaring counter examples, Mill and Gosse (of *Father and Son*), were both cases of sons educated at home by their fathers.

This difference may be more than a cultural curiosity. Continental observers of England in the nineteenth century remarked on two significant features of Anglo-Saxon life—though they did not (so far as I know) connect them. The first is how the English preferred to leave the socialization of their young to hired school teachers, who were often ludicrously inadequate to the task, rather than do it themselves. The second is the astonishing durability of the social fabric, in both a national and a family level. Family solidarity, it seemed, varied in inverse proportion to the authority of the father. Even where boarding schools were not involved, the idea of *loco parentis* was apparently strong enough for battles to be fought with the institution as a surrogate father—leaving open the possibility of a quite different relationship with the real parent.

The inference seems clear that, in at least a significant minority of cases, the conventional Arnold'ian model of growth does not correspond to actual experience. The moment we ask someone to tell their own story we find it related in terms of disconfirmation, conflict and suffering.

The examples we have been looking at were all those of "successful" literary or intellectual figures, yet, almost invariably, they describe their *own* educations not in terms of achievement, but *failure*. This is hardly modesty: writers are, of necessity, an egotistic breed. As Wordsworth and Mill both discovered, it is not the high points of success that one looks back upon in retrospect as moments of growth, but periods of doubt, guilt, and failure.

It is no accident that this pattern should have assumed such importance in the early nineteenth century. Behind Wordsworth's "autobiography" in *The Prelude* lay not merely a new psychological interest in the growth of the mind but a period of intense interest in Biblical and even patristic scholarship. The 1805 *Prelude*, for instance, has the same number of books as Augustine's *Confessions*, and there are other striking structural parallels.

With the destruction of the old allegorical and typological modes of biblical criticism by the German Higher Critics there came, almost for the first time, the recognition that the Bible was itself a record of *growth*. It was no longer seen as a drama in which every event relished forwards to the known outcome, but a story of successive moments of insight—the "spots of time", by which the moral consciousness of a primitive people had developed.

The stories of the prophets and the apostles were seen as records of individual growth. For some Germans, too, it was the moments of doubt, fear, and guilt that were crucial. Even while institutional Churches were tearing themselves apart over questions of miracles, the historicity of Genesis, individuals like Wordsworth, Coleridge and Arnold were finding in the Bible authentic for their own experiences of failure and growth.

As a result, even while the authority of the Bible was apparently in decline, an increasing number of writers were coming to think of growth itself in essentially *religious* terms. Arnold's own career is instructive. As his doubts on the historical status of the scriptures grew, he laid increasing stress on the *moral* values of its texts.

The Victorian agnostics, many acting, in some form in the Arnoldian tradition, rarely if at least the accompanying moral earnestness. Most came to see their loss of faith in terms of a new step, which it undoubtedly was, those like Stephen or Froude who held clerical or academic posts for some there was the added doubt that the particular scientific discovery of biology or geology had undermined their faith only in itself acquire a "moral", and therefore unquestionable, status.

The decay of dogmatic belief surprisingly little to change the implicit assumptions of the Arnoldian view of knowledge. On the contrary, what we seem to find is that the rejection of a valued educational principle almost always involves its replacement by another no less value-charged. In other words, once the connection between learning and growth is grasped in moral terms, it is apparently *irreversible*. As we have seen in other contexts, it is no longer possible to think of value-free knowledge.

The conventional assumption about that relationship, could be and were, inverted. Thinkers both believers and agnostics—find a growing tendency to equate growth, or self-discovery, as the condition of knowledge. Newman, for instance, in *The Grammar of Assent* distinguishes between "notional" and "real" assent to a proposition. His point is simply that only a philosophical assent to such a proposition as "I believe in God" can give "real" assent to those propositions which touch us deeply and personally enough to change our world-picture if they were seen to be false—or, to put it another way, those which can be concretely realised by the imagination.

Education is not a process where by knowledge loads on to prepared growth, but is rooted in the discovery that only comes through disillusion and failure. The story of his own life from the time when like Arnold, Newman was a fellow of Oriel, was in effect the symbolic story of the rejection and finally the inversion of the Arnoldian ideal.

If, and it is, at least, an open question, the traditional model is inappropriate for most people, it is clear that there is a highly significant minority for whom it is the reverse one. Our assumptions about knowledge is about values is one of the most important and distinctive qualities of the English education system; once gained it can become part of the language and will not go away.

But it has also become bound up with the equally unquestioned assumption that success is a value. The corollary is that personal growth is connected with success and achievement. Yet the witnesses of the highest achievers seem to deny this. What Mill, for instance, had found in Wordsworth was a model by which he could come to terms with and learn from his own crisis, just as Wordsworth had himself looked back to Augustine, and Augustine to biblical models.

What they needed in their lives was not a formula for achievement, but a language for failure. What they needed above all from their education was the knowledge that others had been there before them, and had found in defeat the sources of their greatest strength. Today our models drive children that need is still there, only the language is perhaps less familiar than ever.

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BOOKS

Word and person: the great divorce

Literature against itself: literary ideas in modern society
by Gerald Graff
Chicago University Press, £9.75
ISBN 0 226 30600 3

by Roger Sharrock

Readers of E. M. Forster's *The Longest Journey* will remember the first scene in which the hero is at his Cambridge tutorial with a philosopher who is probably drawn from G. E. Moore. They go on in the Cambridge fashion of the time arguing about sense data: "The cow is in the field . . . How do we know the cow is in the field?", and so on. How do we make the transition from a multitude of immediate sensations to a real cow or a real table which may be an object unprovably inferred? A new century of English philosophical thinking had been inaugurated but it was still obstinately to adhere to an empirical theory of knowledge, like all British philosophy since the seventeenth century with the exception of Bradley and the brief phase of Oxford idealism which he dominated.

As the trade-gap widened, British philosophers still remained the representatives of a nation of shopkeepers, counting the physical commodities on the shelves and wondering if they would be there next day (or how they could *know* they would be there next day), village shopkeepers blissfully ignoring post-Hegelian developments in European philosophy. When the young Ayer in his first book *Language, Truth and Logic* (1936) expounded a raw logical positivism, reducing valid propositions to purely empirical or purely logical ones, the work had a wider popular appeal than any subsequent developments in linguistic philosophy because its radical scepticism responded to the mind of the time. If the foundations of religion, morality and art were undermined, did not this simply endorse the facts of common experience in a world in which the Bishop of Burgos blessed the Spanish Nationalist troops while Guernica was burning, and I. A. Richards (soon to change his views) had classified poems as groups of stimuli acting upon the nervous centres with varying degrees of complexity and delicacy?

In the half century that followed there has seen not only the erosion of those residual certainties about political action which inside intellectuals take sides in Spain, and made some of them hold on to their beliefs till Hungary, Czechoslovakia and Vietnam; there has also been an inversion of the relationship of literature and the criticism of literature which is not unconnected with this philosophical reductionism, just as that in its turn is an expression of the general movement of our society.

But this transformation has involved a remarkable transfer of roles. When it was not done to make value-judgments in philosophy and ethics the ones of that perpetual serious consideration of permanent human problems, which seems in any age unavoidable, became shifted onto literature, or rather onto the interpretation of literary classics. In the age of the great quarterlies, *Criterion*, *Scrutiny* and *Partisan Review*, when criticism was stepping high, academic philosophers might treat moral judgments as merely emotive, but one could leave the common room or the pub, and go back to read R. P. Blackmur or some other critic, for the real function of moral values as displayed in the later novels of James. But now the transformation is again transformed and New Criticism, always inwardly moralistic underneath its protective camouflage of the close reading of a text, has been superseded in such a manner that the wheel has come full circle. It is now the creative writers, whether prompting or plodded by academic professors, who are the custodians of the exact status of the cow in the field. With the advent of linguistics and structuralism literature has become inward-looking: a distinction has to be made, as by Jonathan Culler, between the propositional form of an utterance and its use as a speech-act; the work is its own world, and any view of life it might start from is converted into a formal device: thus a critic of Jane Austen, following in the wake of Susan Sontag, can describe her novels not in terms of places and the relations between people but of "spatial secondary illusion" and "*leitmotiv*".

Roland Barthes, whose writing on Robbe-Grillet Graff criticizes, maintaining that "even a nihilistic message is a message, is asserting a truth-claim, a radical anti-message".

Part of the responsibility for this ingrowing of literary art must rest with Northrop Frye who considers all human acts and all literature as centripetal and non-referential. Poetry has its own life and human and social life too seek the discipline of prescribed codes. The end of the process is that "from a centripetal, secluded, infinitely boring, stylistic balancing acts out in space of such writers as John Barth and Donald Barthelme. All good students of Northrop Frye are supposed to know that irony depends for its success on a suppressed but not absent standard, a lifting of the curtain for a moment on the actual. But so many modern fictions, like so much of modern conversation, are a throwing up of inverted commas with nothing, parodies where the meaning of the word parodied has been lost, thus leaving nothing but unease. It is the same with the clever people who profess to find television commercials witty and present to be able to live in the stirless world behind the inverted commas. One reason for this nervous throwing up of inverted commas around their statements by writers and speakers is that they are conscious of working in a very old language in which everything seems already to have been said; that, and the disappearance or decay of recognized belief-systems.

Mr Graff's packed and on the whole lucid book seeks to some effect, from the meridian of New York, that the post-modernist literary movement does not possess the originality that it claims, and that the "reflexive structures" of its fictions represent a fruitless attempt to saw away with a blunt tool at the still sappy branch connecting them with contemporary society and late commodity capitalism. The concept of the *avant-garde* which stimulated the great creative minds of the earlier twentieth century has vanished in a period in which there exists no genuine adversary culture but only the new consumerism, latter-day Babbitts mediocre and media-ridden and only too anxious to keep up with whatever *avant-garde* Joneses may be coming over the horizon. The liberal West, still without concentration camps, and split only by the polarization of the ideologies of mediocrity and terrorism, has no intelligentsia which tries to devise a *univers concentrationnaire* of the mind. The essence of the *gulag* is codes: discipline, timetables, punishment, deprivation by rote. Recent American and French novels have applied the code of violence to language; *verbum* becomes *verbar* (if I may be allowed a suitably Heidegerian language game), the word a blow in the face of the reader. But there is no wire round these camps; the contemporary sado-masochistic Babbitt can come and go as a visitor when he is experiencing those guilts of affluence or ancestry which his permissiveness has curiously not dispelled.

To return to Mr Graff, he traces the trouble, rightly, to the New Criticism and its mixed descent from the contradictions of Romanticism which tried unsuccessfully to reconcile the autonomy of the art-work with the pretensions of the poet as saviour of mankind. The underlying theoretical presuppositions of the New Critics were more important than their cult of close (and ahistorical) reading. A poem should not mean but be, and belief in the autonomy of the imagination led to scepticism about rational and logical approaches to experience. At the same time they introduced from Eliot the concept of a waste land, cultural disunity, without the referential apparatus which Eliot later found for coming to terms with it. Graff neglects here the fact that many New Critics were High Anglicans and American Southerners, concerned like Eliot to propound the unified imagination as a stick with which to beat scientism.

But Graff is right in seeing that the next step led in two directions, both claimed in varying degrees by the post-modernists, literary and sociological, Bloom, Barthes, Blanchot, Foucault, Lacan and so on: formalist self-sufficiency or a view of literature as the only possible ordering of an amorphous reality — a visionary company, "ideas of order". He is acute in noting how "myth and "fiction" were good and bad words respectively when applied to literature or to the political realm in the early fifties." Now the distinction has been blurred and since 1963 myth has become an acceptable instrument for the interpretation of political and social "reality". When Kermode speaks in *A Sense of an Ending* of "escaping" or "discovering" fictions in order to make sense of the world, or of fiction degenerating into myth, he offers no epistemological basis for the relative values of these escapes, discoveries and degenerations. When he states that "all books must be read with a difference" he abandons the common pursuit of criticism in favour of a pluralism of isolated readings, since he leaves no recognized human reality against which they may be measured.

In the *TLS* on February 22 the Merton Professor of English Literature expressed the view that the disdegrement of literary "evaluation" had been effected with remarkably little fuss (English critics seem never able to get away from Eliot's terminology even when they are saying it and opposing him). In support of this he quotes the exactitude of the natural sciences; "not shared by literary studies, the subjectivity of readers (but what a lot of them agree about Shakespeare and Mickey Spillane), and the fact that Tolstoy thought *King Lear* an inferior play (surely an "evaluation" by Professor Carey, since if Tolstoy wasn't Tolstoy why mention it?), concluding with a sop to Cerberus, humanism, and perhaps his profession, in an attempt to explain why literary discourse still went on was because "it is for the sake of people that literature exists": the critical subjectivities rub together to keep warm, not of course to convince each other, since without conviction there can be no convincing.

But, in the most interesting paragraph in his article otherwise remarkable for its sublime overlooking of the distinction between the truths of the natural and human sciences which has been a common place in serious European thought at least from Dilthey onwards (he could have found it all in Newman on certitude and assent, in any one) is a darkly eloquent paragraph in which he appeals to the dogmatic theology of modern nihilism. In a godless universe man is the temporary occupant of a cooling solar system (mere literary echoes: Auden this time); he is an accident of chemistry, and ethical and aesthetic judgments are feeble groupings at imposing significance on "the amoral flux which constitutes reality". There we can feel both pity for the author and involvement with him. For we remember the old man in *A Farewell to Arms* who when asked whether he believed in God replied, "Sometimes. In the night." The process can work both ways, and whatever our beliefs (scientific atheism being a very definite one) there are always varying degrees of assent or doubt.

But as Graff maintains, when he is criticizing Barthes on Robbe-Grillet, even a nihilistic message is a message, is asserting a truth-claim, a radical anti-message. In a similar way post-modernist radical aesthetics in its escape from established stylistic codes is always politically radical even when it does not intend to be. Thus it may proclaim the "heightened consciousness" of radical liberationism as did the Beats and the projective poets, or, in dissolving the barriers between high and low culture, have social and widely agreed audience effects: the quotation marks go up round the ironies but there is always a studio laugh. Turning to better writers, Lucky's long speech in *Waiting for Godot* is so moving a statement of the deficiencies of the jargon of argument and communication in Western culture that it contradicts the clear line drawn by the post-modernists between propositional form and pure speech-act; and the "technicians of sorrow" using their tools like dentistry "pulling up Proust's *Contos* is not merely a series of heuristic devices: there are meanings there however zany or unpalatable. Referentiality will not go away. Gombrich remarks in *Art and Illusion* on the retention of the representative element even in abstract forms. Graff reminds us of Popper's critique of Kant: even if our minds are constitutive of the world we perceive, our impositions of our subjective "laws" fail again and again, so that our knowledge of the world owes as much to the resisting reality as to our self-produced ideas. In spite of a profession of alienation Mailer in *The Armies of the Night* and other books tells us about contemporary America. Musil's *The Man Without Qualities*, in spite of its modern critics, sings us a song about old Vienna. Value will not go away either. Ken Kesey's *One Flew Over the Cuckoo's Nest* sets up the alienated mind as a value.

Graff's chapter on the effect of the new ideologies on the teaching of English in the universities has more purely American applications, though there is an interesting parallel with the *Black Papers* reaction against progressivism in the schools over here. First, the appeal to relevance, the assumption of anti-status quo, the acceptance of conflict: "process over product" and words as play. Then a reaction, "Back to Basics", learning to read, write and spell, and so on, but Graff is not happy about this movement because it does nothing to solve the problem of cultural incoherence which was there in the first place and which made the old "Basics" a whited sepulchre. He is stronger in his demolition job on many aspects of post-modernism than he is on saying what we must do now as intellectuals capable of critical discourse and not just of rubbing each other's subjective itches. He has some valuable remarks on the importance of a recovery of the historical sense: "... only a historical view provides a perspective from which to assess the richness and poverty of the contemporary, so we what has been gained from this break with the past and what has been lost." I wish he had spent more on how this rehabilitation of history is to be brought about and wonder whether the historical hermeneutics of Gadamer, whom he mentions once in another context, would be helpful here. But one can only applaud him when he writes: "The point is not to destroy pluralism but to transform it into a pluralism defined by the community of debate rather than a pluralism of incommensurable positions" (page 125).

A final consideration is that, in spite of the relative jet distances, New York seems much nearer to Paris and Geneva than London or Oxford in the matters we are talking about. Has not English literary criticism since Lewis become too parochial? Of course one can read too much, write too much, drop too many names, decline in *mauvaise foi* that they order these things better in France, but one can never think too much, and behind the linguistic connoisseurship of Blanchot and Foucault and Derrida there lies serious thought that demands attention. To be fair, there is another side to this: the value of parochialism when some of the worthier writers to be criticized are healthily English, parochial. The intellectual distance between London and academic America is still very great and post-modernism and anti-realism have not fully established themselves here. Kingsley Amis, the old master, Kingsley Amis has no hang-ups about referentiality, and after the merest of flirtations with Raymond Queneau Iris Murdoch went in search of the great nineteenth-century novel of character and never came back, though sending strange and wonderful reports on the way. In the Second World War before the Normandy invasion a standard form of words had to be found at GHQ for telephoning operators, because when one of them asked a British staff officer "Are you through?" and he replied yes she promptly cut him off. "Are we through? would seem the opportunistic theme for any future Anglo-American dialogue on nihilism and communication.

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BOOKS

Just how many Marxisms can there be?

The Two Marxisms: contradictions and anomalies in the development of theory
by Alvin W. Gouldner
Macmillan, £15.00 and £6.00
ISBN 0 333 28879 3 and 28880 7

Professor Gouldner argues that interpretations of Marx, or what he unfortunately calls "Marxisms", fall into two distinct groups, namely the scientific and the critical.

Scientific Marxism views Marx as a determinist, links him with Darwin, analyses society in terms of the crude base-superstructure model, has no room for ethics, takes an optimistic view of history, argues that history is governed by laws, gives an explanatory pride of place to social structures, breaks up Marx's intellectual life into two stages and prefers the older to the younger Marx, takes an evolutionary view of social change, and so on.

Critical Marxism rejects each of these theses and advances a diametrically opposite view. It offers a "voluntarist" interpretation of Marx, links him with Hegel, views society as a complex totality whose parts are dialectically related, takes a pessimistic view of history, emphasizes moral idealism, man's creative role in history, the importance of charismatic leaders, the unity of Marx's thought with a slight preference for his early writings, and takes a catastrophic view of social change, and so on.

For Gouldner scientific and critical Marxism are ideal types or analytic distinctions. He thinks that some Marxists fall fairly and squarely within either category whereas others do not. In the latter case he suggests that we undertake a "factor analysis" and classify them according to whether they express more of scientific or critical Marxism. In his view Althusser, Poulantzas, Galvano della Volpe, Godelier, Bettelheim and others belong to the scientific, and Lukács, Gramsci, Sartre, Marcuse, Habermas and others to the critical Marxism.

Gouldner accounts for the two schools of interpretation in three related but rather different ways. First, Marx's thought was characterized by a fundamental tension evident in *all* his writings. He sympathized with both voluntarism and determinism and never succeeded in integrating the two, thereby giving rise to two different schools of interpretation. Second, Gouldner argues that every theory is immersed in and derives its plausibility from a body of unarticulated assumptions. When its originator articulates it in a propositional form, he generally takes the latter for granted. When Marx articulated his theory of historical materialism, he for various reasons did so in scientific terms and "repressed" its critical dimension as demonstrated by his reluctance to publish such work as the *Paris Manuscripts* and *Grundrisse*. Third, Gouldner argues that in the course of rebelling against Hegel and the Young Hegelians, Marx developed his historical materialism and stated it in terms of sweeping generalizations. His subsequent historical research, however, led him to modify and even reject some of these. Since he never reformulated his theory in the light of his researches, his thought contained a tension. Scientific Marxism concentrates on his explicit theoretical formulations, whereas critical Marxism relies on the theory implicit in his historical researches.

Professor Gouldner has written a valuable book. While appreciating the differences between Marx and Engels he rightly refuses to make Engels a scapegoat for Marx's weaknesses. He offers a most stimulating account of Marx's intellectual evolution and elucidates the neglected background assumptions of his thought. His discussion of the logical structure of social theory is brilliant and repays close study. And his criticisms of Marx's theories of civil society, class and state are perceptive and generally persuasive.

Despite these and other merits the book suffers from several basic limitations of which I have space to mention only one, namely oversimplification. Gouldner has a persistent tendency to oversimplify highly complex bodies of ideas and set up untenable dichotomies. He says that Marx's thought is characterized by a "deep" and irresolvable tension between voluntarism and determinism. One would have thought this a non-issue, not only in philosophy but also and especially in social theory. Every social order has two basic characteristics. First, it can be changed, and second, it can only be changed in certain ways and within certain limits. Since it is not a *tabula rasa* and has a determinate character, full-blooded voluntarism is a false doctrine. And since a social order consists of human institutions sustained by alterable human beliefs, full-blooded determinism is also false. Marx knew this and observed that men make their own history but only within certain limits.

Like any other theorist of history he aimed to specify both the power and the limits of human freedom. Rather than appreciate this and explore the complex manner in which Marx relates human freedom and social constraints, Gouldner dogmatically sets up an abstract and false contrast between voluntarism and determinism neither of which he defines, slots Marx's isolated remarks under one or the other, and concludes that Marx's thought contains a deep tension. His whole approach is faulty and misleading.

Gouldner's tendency to oversimplify is evident also in his discussion of the so-called two Marxisms. He does not show how the various views grouped under scientific and critical Marxism are internally related and constitute coherent wholes. There is no obvious reason why a man who holds that history is governed by laws should also take an evolutionary view of social change or an optimistic view of history. Far from being ideal types the two Marxisms are really amorphous collections of disparate views. Further it is surely not enough merely to point to the existence of the two schools of interpretation. One needs to show which of them offers a more adequate and faithful account of Marx. Finally, since it is evidently possible to hold views falling under both types of Marxism such that one can be said to be *more* of a critical or scientific Marxist, the two terms be analytically distinct or mutually exclusive as Gouldner contends. This is not to deny that interpretations of Marx can be grouped together and classified; only the Gouldner's classification is too clumsy and confused to be of much use.

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Bias in television news

More Bad News
by the Glasgow University Media Group
Routledge & Kegan Paul, £17.50
ISBN 0 7100 0414 1

Doubtless this second volume of research from the Glasgow Media Group will maintain the controversy stimulated by its predecessor, *Bad News*, for it continues, by a detailed analysis of the news coverage of the economic crisis of early 1975, to assault the much believed belief of news broadcasters, that the news is an unbiased reflection of reality.

What it convincingly shows is that this coverage was indeed selective, not a neutral reflection of events, and that this selectivity was not dictated by the need to provide action-packed pictures for viewers to watch, since much of the time is devoted to "talking heads"; but by journalistic criteria as to what is newsworthy. The application of these criteria led, for example, to a one-sided emphasis on the pay-restraint aspect of the Social Contract and ignored that part of it which referred to protecting the living standards of workers, and to a greater prominence being given to the Treasury view of our economic malaise at the expense of the economic strategy inherent in Mr Benn's Industry Bill.

These conclusions, however, are a modest return for the investment of analysing many hours of videotape and for 480 pages of meticulously presented, not to say tedious, detail. Indeed, one wonders why they should invest so much debunking a hypothesis which is patently absurd, however tenaciously newsmen might insist to the contrary. In fact, the authors claim, more, much more, they argue that their close scrutiny of what is reported, the language used by reporters and the visual images that accompany reports, all of which they detail at lovelimpte length, reveals the prevalence of a view of the economic order and the causes of its crisis which was consistently anti-trade union and anti-labour. Unfortunately, they seem to believe that in knocking down the "straw man" of unselective neutrality, they thereby establish their own theory of systematic bias. They do not, and when these hypotheses are separated, the evidential basis for the selected of them is seen to be decidedly shaky.

They concentrate almost exclusively on the meanings implicit in the news as broadcast, but because they seek to establish these meanings independently of what broadcasters intended or viewers actually understood, all that they are able to show is that anti-labour implication *could* or *may have been* drawn from news coverage. What they do not and, given their method, cannot show is that the potential meanings that they infer have any preferential status, despite their repeated assertions to the contrary.

If preferential status could be given to the Glasgow Media Group's inferences and newsmen were to be held responsible for them, what responsibility will the group accept for implications that may be drawn from this book? The group complain, for example, that the news implicitly degrades the rationality of workers by concentrating on the consequences rather than the causes of disputes, but is it not to degrade the rationality of newsmen to describe their actions as "ideological" itself a "keyword" designed to evoke particular connotations, of which they also complain?

Moreover, they too address themselves almost exclusively to the consequences rather than the causes of news selectivity. Indeed, one of the most noticeable aspects of both volumes is the almost total abstention by the authors from any attempt to explain the patterns of bias they claim to have found. They seem content to attribute all bias to the newsmen' "inferential frameworks", that is, the view the newsmen have of the economic order. But this oft repeated assertion is based on nothing more substantial than a few days casual observation of the newsrooms, whose members were either indifferent or hostile to the research. The fact that by their unwillingness to cooperate, the newsmen virtually invited the superficial, journalistic treatment they received in *Bad News*, one does not alter the flimsiness of that "research" as a foundation for any kind of explanation.

More serious still is the evident lack of economic understanding among those who purport to analyse economic news coverage. They complain that the news routinely reported that "earnings were far outstripping the retail price increases", and were, therefore, perpetuating the inflationary spiral. This the authors seek to dispute by citing evidence that "real wages—income adjusted to take account of increased prices and taxes—did not increase by more than 2 per cent or so during the period. This, of course, is irrelevant to whether or not wages were inflationary, since it ignores their relationship to productivity, for if this does not increase in line with wages, labour costs are simply passed on as price increases at a later date. It was to this lag between current wage increases and likely future price increases that the news coverage clearly pointed.

This error might be excusable, given the absence of a self-confessed economist in the group and their apparent reliance on the financial pages of the press and a single economic text; what is not excusable is the blatantly misleading use of evidence. What the authors regard as a strong piece of evidence for bias is what they claim to be a discrepancy between a Price Commission report and its treatment on the news. They observe that the news reported that "inflation is now rampant and, according to the Commission, wage inflation is almost entirely to blame". They, by contrast, claim that "A careful reading of the Price Commission's report shows that a number of factors apart from wages were cited as contributing to price increases".

I too have read the report, and while it is true that it mentions factors other than wages as contributing to inflation, it does so only to dismiss them as either insignificant or merely the indirect effect of wage inflation. It concludes: "the primary factor causing prices to rise is—and can only be—rising labour costs. . . . None of these (other) items therefore can alter the conclusions expressed above; but on the contrary tend to reinforce it." There is no doubt that the statement attributed to ITN's industrial correspondent was a wholly justified summary of the commission's view.

So flawed is this evidence that one is obliged to entertain the severest reservations about the validity of the research as a whole. This is a pity, because it not only underlines that which is of value in this volume and its predecessor, but also because it sours the important enterprise of researching the news. Nevertheless, I confidently anticipate that this research will be quoted *ad nauseam* in subsequent years as having shown a demonstrated and illustrated "that television news is systematically distorted to the disadvantage of the workers". Such, regrettably, is the poverty of much current sociology.

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Structure and function

Process and Structure in Higher Education
by Tony Becher and Maurice Kogan
Heinemann, £12.00
ISBN 0 435 82507 0

Professors Becher and Kogan apply to higher education in Britain an analytical model which they believe can also be usefully directed towards other countries and other public services.

The model is straightforward enough. First, they distinguish four elements or levels in the structure of the higher education system. These are the central authorities charged with policy, planning and overall evaluation; the individual institutions; so-called "basic units"—subject-based departments, schools of study, and so on; and finally individual staff and students. Next, it is argued that one must distinguish the monitoring and maintenance of values within the system from the practical business of getting on with the work to be done at the different levels. Becher and Kogan call the former the "normative" and the latter the "operational" mode. Clearly there is an interaction between the two; and the ways in which this occurs, and with what results, constitutes the "process" referred to in the title. The normative mode involves the structures and processes of appraisal and judgment at each level of the system. The operational mode is a matter of allocating resources, responsibilities and tasks. As long as the two modes are "in phase" with one another the system as a whole is in dynamic equilibrium. If they get out of phase, developmental change occurs, resulting in a restoration of equilibrium.

Few sociologists will have any difficulty in recognizing the Becher and Kogan model and analysis for what it is. Quite simply it is a straightforward restatement and application of the structural-functional approach to social and organizational analysis, and it is strongly reminiscent of much American sociological work of the 1950s. It has in fact all the well-known and much discussed strengths and weaknesses of that form of analysis. Becher and Kogan's theses are well aware of the model's limitations. They even point to at least one important synchronic phenomenon which is given only an implicit place in their model—"the social and economic climate within which any given higher education system exists". They go on: "any historical movement of higher education would take the social and economic background as an essential context within which to explain the way in which the academic enterprise has developed". Having thus drawn attention to it and themselves used the term "essential", they none the less surprisingly decide to leave it out of the model. Social structure, and political and economic forces are not of course left out of the book, but to exclude them from the analytical model itself is peculiar to say the least.

Can one understand what was on in the LSE, or the Universities of Warwick and Essex, in the late 1960s without giving political and economic analysis a more central role? Can one understand the differences between Oxbridge and the polytechnics without attending to the internal and external social and political structures? If we are interested in, say, economics and sociology as important academic fields and departments which have usefully expanded since the Second World War, will the Becher and Kogan model be adequate? Perhaps they could have tested and demonstrated the worth or otherwise of their model by examining in detail key or critical policies, decisions, events, institutions or even individual cases. There are hints of this in the book; and in the final chapter they applies the model provisionally to other policy areas they mention, for example the William Tyndale School case when looking at the school system.

Becher and Kogan are going on to deal with other areas of public policy and service more fully in another book, and intend to employ this model. One wonders whether they can really hope to be convincing about the recent history and contemporary structure and functioning of the health service, personal social services, education and so on, without bringing political economy to the fore in their analysis. The industrial relations crisis in the public services two winters ago, and the arrival this year of a Government committed to transforming the structure and role of the state, argue for an explicit place for conflicts of ideology and interests. The industrial models of public policy and practice.

R. G. Jobling

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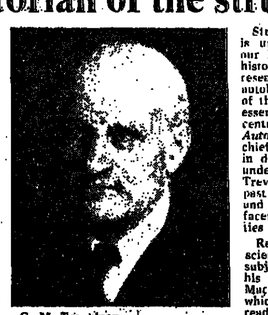
BOOKS

Historian of the struggle for liberty

George Macaulay Trevelyan: a memoir
by his daughter Mary Moorman
Hamish Hamilton, £9.95
ISBN 0 241 10358 4



G. M. Trevelyan

"George Macaulay Trevelyan was the best-known and best-loved historian of England in the first half of the twentieth century." Few would dispute the opening sentence of Mary Moorman's memoir of her father. His *History of England* (1926) and *English Social History* (1944) were widely read by the general public and achieved for history as a subject a popularity it had not enjoyed since the days of Macaulay. His textbooks *England under the Stuarts* (1904) and *British History in the Nineteenth Century* (1922) became the staple diet of generations of undergraduates and sixth formers. Even today, close on 20 years after his death, Trevelyan still ranks as one of the most famous, though not one of the most fashionable, of our national historians.

Trevelyan himself wrote an autobiography which he felt supplied posterity with all that it needed to know about himself. Published in 1949 and only fifty pages long, it deals only with "the influences which led me to write my books, the only part of my activities and opinions which concern the public". His life and his writing were inextricably intertwined. As he was sure that he was already too old to write any more books, no further instalment of autobiography or biography would be needed. In fact, he sternly warned off any intending biographer: "May my malison alight on anyone who attempts to publish any of the screwls that were once my letters; I trust that they have all long ago passed through the waste paper basket". Adopting more practical measures to obstruct would-be pursuers, he himself burned most of his private papers and defensively asserted that he had in any case never written a private letter worth printing.

Though undoubtedly a work of devotion, therefore, Mary Moorman's memoir of her father has to begin with a double justification: that Trevelyan and his world have now safely passed into history and that both on academic and literary grounds the quality of her father's surviving letters made the task of reconstructing and illustrating his life intrinsically worthwhile.

Strictly speaking, Mrs Moorman is unable to add substantially to our knowledge of Trevelyan as an historian and of his methods of research and writing. His own autobiography, though only a fifth of the length of this book, tells us essentially as much about this central aspect of his life. (The *Autobiography*, naturally, is her chief source.) Where she succeeds in doing very well, however, is to underline certain aspects of Trevelyan's approach to both the past and to history as a subject and to connect these with other facets of his philosophy and activities (for example in wartime).

Rejecting the extremes to which scientific history had taken the subject, Trevelyan firmly upheld his own "family tradition" (of Macaulay *et al*), of literary history which would appeal to the general reader. History for Trevelyan was like an unfolding pageant and an unending struggle for the achievement and maintenance of liberty. (It was no accident that he chose to write about Wyclif, about Garibaldi and the Italian Risorgimento and about the English upheavals of the seventeenth century.)

Trevelyan's unswerving patriotism comes over unmistakably from Mrs Moorman's pages as one of the principal ingredients in his outlook on England's past and its present which preserved this heritage. "Brought up at home", as he confessed, "on a somewhat exuberantly Whig tradition", Trevelyan's political sympathies remained fundamentally liberal throughout his life. Though his paternal interest in "the people" at large was unabiding—in writing for them, educating them, and in giving them free access (through the National Trust which he championed) to the English countryside which he loved so passionately—Trevelyan could never bring himself to accept the principles of socialism. His reaction to the first Labour government of 1924, for example, is typical and revealing:

> As a historian and an Englishman it delights me to see the flexible old machine of the constitution swallowing and assimilating yet another "bloodless revolution"—we have had such dozens of them.

As well as Trevelyan's politics, his romantic imagination and boyish enthusiasm are other features of his approach to the past that Mrs Moorman brings out very clearly. "How romantic is every age if it could only see itself so!. . . What wondrous things there are stowed away in this island!" Such expressions abound in Trevelyan's letters. Not surprisingly, therefore, since he cultivated rather than repressed his own romantic imagination, he admired and used the imaginative insights of literature in his work as a historian. For Trevelyan, Shakespeare was not simply a source but a companion.

In these, as in other respects, Trevelyan's self-awareness was as great as his biographer's knowledge. "Apostle of literature" was one label which he unashamedly applied to himself. "Poet", "puritan atheist", "interpreter of history" (rather than "specialized digger") "romantic" were others.

R. C. Richardson

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John Seeley

Sir John Seeley and the Uses of History
by Deborah Wormell
Cambridge University Press, £15.00
ISBN 0 521 22720 8

As a leading nineteenth-century academic, John Seeley pronounced dogmatically, and with authority, on a wide range of contemporary political, religious and educational questions. When a young man and Professor of Latin at University College London, he aroused public opinion with a best-selling humanist interpretation of the Gospels; latterly, as Regius Professor of Modern History at Cambridge, he was knighted in recognition of his patriotic popularization of the colonial ethic.

Seeley remains one of the few eminent Victorians to escape the customary contemporary funerary rite of a two-volume life and letters. Miss Wormell, with what is the first major study of Seeley since that of Adolf Rein nearly 70 years ago, has attempted to rectify the deficiency. Little of Seeley's extensive literary output has escaped her critical eye, to which the excellent bibliography bears more than adequate testimony, yet the general impression of this "a book about his career as a whole" remains frankly disappointing.

The reader is presented with an accurate, in places painstaking, account of Seeley's assertions on innumerable questions of reform, and with a great many thorough but analytically shallow summaries of his major academic studies. What is missing, however, is a description of their social and intellectual context. While Seeley is an interesting and not atypical example of an academic attempting to carve a niche for himself and his discipline in the expanding educational world of the late nineteenth century, little or nothing of this environment is revealed.

This deficiency limits the effectiveness of Miss Wormell's strongest and most telling points of interpretation. She is bold enough to make the novel suggestion that Seeley's preoccupation with a directly utilitarian philosophy of historical methodology was part an attempt to gain recognition for a new university discipline—to encourage the study of history as something practical and worthwhile. Nevertheless, without some consideration of Victorian educational theory and of the intellectual force which history as a mode of experience exerted over the popular mind, the full significance of such an important point is lost. Henry Sidgwick called the nineteenth century "the predominantly historical century", in recognition of its immense strength as a social force, but at the same time in more general educational terms, history was deemed unworthy of serious study.

Seeley was quick to seize upon this, emphasizing that the educational strength of history as a developing discipline was directly linked to its apparent social utility. Whereas in England history had previously been the hobby of churchmen, politicians and men of leisure, Seeley believed its practical predictive capacity for present politics belied such flagrant amateurism. By coupling the obvious intellectual appeal that scientific methods held for the educated mind with that of history, Seeley was asserting that academic historians, as a scholarly elite, had a definite role to play in modern society. Furthermore, both the criteria of a "liberal" and a "practical" education were met within the confines of a single discipline.

The early chapters uncovering the many influences determining Seeley's intellectual development are excellent; and Miss Wormell has succeeded in presenting a clear and balanced image of his complex personality. Nevertheless, the structure of this book is such that despite the unity of each chapter there is a good deal of repetition, which further serves to bury the central theme—the utility of history—under the debris of surplus secondary detail. Such thoroughness treatment renders the work midway between biography and intellectual history, unfortunately satisfying the critical standards of neither.

Peter Slee

Peter Slee is a research student at Emmanuel College, Cambridge.

Queen Anne—a hard-working politician

Queen Anne
by Edward Gregg
Routledge & Kegan Paul, £17.50
ISBN 0 7100 0400 1

Because she was a woman and he was German, Queen Anne and George I have been regarded as monarchs whose unobtrusiveness hastened constitutionalism. Hard on the heels of Ragnhild Hatton's rehabilitation of George comes Edward Gregg's reappraisal of Anne. This is the first biography to make full use of the Blenheim archives and Gregg has managed to place in chronological sequence over 1,000 of Anne's undated letters.

He demonstrates that Anne's authority has been underrated. First, because of her sex. She had her own reply to this: "Whoever of ye Whigs thinks I am to be Hectored or frighted into a Complyance tho I am a woman, are mightey mistaken in me." Secondly, because of her physical weakness. As a result of gout and the depredations of 17 pregnancies, Anne was an invalid at 35. Yet she attended more Cabinet meetings than any other monarch, kept the Lords in line by her regular incognito presence, and dragged herself from her sickbed to open Parliament.

Thirdly, and crucially, Anne has been seen as shaping her politics according to bedchamber bickering. Without the evidence left by the egregious Sarah Churchill, Anne's biography could barely be written, but whenever looking through Sarah's eyes, Gregg has properly adjusted for Sarah's biases. Immured in her royal role, Anne had a deep need for the simple intimacy of "Mrs Morley" and "Mrs Freeman", but it is apparent that private emotion submitted to politics in steering the course and collapse of their friendship. For Godolphin and the Marlboroughs, the price for having forced Junto Whiggery upon the Queen and for perpetuating an unpopular war, was their removal from office.

Gregg is a little cautious in assessing Anne's impact on party and prerogative. How powerful was the Queen? She never balked at the new authority of Parliament; indeed, she enhanced the Commons by circumscribing the Lords in her creation in 1711 of 12 ministerial peers. Her support of measures assisted but could not override parliamentary majorities; she was committed to the Union with Scotland and did not shy from the diplomatic immoralities involved in achieving peace with France. She was the last monarch to veto a bill; surprisingly decide to leave it out of the model. Social structure, and political and economic forces are not of course left out of the book, but to exclude them from the analytical model itself is peculiar to say the least.

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R. G. Jobling

R. G. Jobling is a fellow of St John's College, Cambridge.

An experiment in executive coordination

Lloyd George's Secretariat
by John Turner
Cambridge University Press, £12.50
ISBN 0 521 22370 9

John Turner's excellent monograph offers an account of one of the oddest administrative devices known to the history of government in Britain, the collection of men, offices and hunches which together comprised the Downing Street development usually referred to as Lloyd George's "Garden Suburb". It was neither so large nor so formidable as the label implies; and it was a shortlived experiment in executive coordination which did not survive the end of the First World War. The activities of (predominantly) W. G. S. Adams, Philip Kerr, J. T. Davies, David Davies and Waldorf Astor nevertheless generated considerable heat among constitutional purists and depressed Anglophiles. More recently they have helped historians in their determination to present Lloyd George as a Milnerite Trojan horse wheeled about by his subordinates.

The phenomenon is easily explained by Dr Turner supplying none of these enemies. In both its origins and its day-to-day workings, the secretariat provides little evidence for a history of conspiracy or revolution. The secretaries did not subvert the authority of ministers nor, with the painful exception of David Davies, did they try to do so. Rather than having the function of by-passing existing channels of administration, they came into operation to sustain them at moments of stress or incapacity and to smooth the inevitable tensions found within an executive working at full stretch. If Philip Kerr—temperamentally the most ideological of the group—took to himself the task of announcing "the higher interpretation of the war", he and the others were more often heard (or seen listening) in quieter corners of policy-making. Adams in food production or Irish strategy, David Davies and Kerr in Russian policy, Astor inevitably and unsuccessfully in drink.

Dr Turner enjoys himself with the Milnerite interpretation of these years and dance playfully on the nimbus of irony. Quite simply, the secretaries were not homogeneous in any sense, were not (Kerr excepted) disciples of Milner and were mostly unsuccessful in imposing any distinctive policy on Lloyd George. Unlike some fellow-observers of the coalition government, Dr Turner does not forget that parallel passages between private memoranda and Lloyd George's speeches do not constitute influence. He keeps before him the lesson that Lloyd George never read anything he could avoid reading.

Yet although Adams liked to write speeches for Lloyd George to ignore and despite Kerr's readiness to write memoranda about anything that occurred to him, the thought arises that Lloyd George's resistance to the written word may paradoxically have increased the influence at his secretariat. Its members were, after all, in a position to surround their master with a discursive milieu of a marked character as well as to act as scribblers, imperial agitators and yes-men. The secretaries could say in words what Lloyd George would not read in prose; they could slide pieces of pre-fashioned vocabulary unobtrusively into his mind; they could create an ambience of their own between the Prime Minister and other senior politicians or the press which, increasingly, shaped political images for the public. This "influence" is not quantifiable but then significant forces in politics rarely are.

The story of the secretaries' encounters with the established administrative machine supplies an interesting perspective on the decisive years of the war. It has to be said that some of it is less than compulsive reading; inevitably there are dry patches of administrative chain-stitching in an exercise of this kind. But Dr Turner's study throws light on a number of dark places, not least on the formative experiences of those who were twenty years on, to walk the lawns of Chevener with Baldwin and Neville Chamberlain.

Michael Bentley

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BOOKS

The fossil record

The Natural History of Fossils
by Chris Paul
Weidenfeld & Nicolson, £15.00 and £6.95
ISBN 0 297 77379 0 and 77584 7

To most people, fossils are merely the remains of past forms of life, which tell us about the history and evolution of animals and plants. Even to many geologists, they are merely complex-shaped objects which conveniently enable us to correlate strata in different areas. In this book, Dr Chris Paul has attempted to show the much greater variety of information that can be extracted from the fossil record, for he believes that the record is sufficiently adequate to form a basis for the interpretation of many different aspects of conditions during the earlier history of our planet.

He commences by outlining the various processes by which fossils originally form, how they may later be chemically or morphologically altered, and how one can attempt to estimate how far the fossil has been altered or moved from its original position and condition. After briefly describing the different types of rock, Paul then considers the evidence that the rocks themselves provide on the history and environment of the fossils.

After this basic introduction, the next two chapters are a review of the evidence for the association of fossils at all levels, starting with small local fossil communities and working up to past faunal provinces and their relationship to continental drift and major climatic belts. Paul recommends that all palaeontological field studies should include a systematic check-list of points to look for, and he gives useful illustrations of the types of observations that should be included, some to be made on individual species and others on evidence for associations. He gives a clear account, with examples, of the ways in which it is possible to distinguish between the different types of fossil community, confederation and assemblage.

In the chapter on "Faunal Provinces and Continental Drift", Paul outlines the ecological, stratigraphical and taxonomic difficulties involved in comparing faunas from different areas, but gives a very brief account of the evidence for former faunal provinces, dealing only with Palaeozoic marine faunal realms (some maps would have been useful here). Most of this chapter is concerned with the use of sediments and fossils as indications of past climates. He gives here a timely warning against too-ready acceptance of present-day conditions as representative of past climatic regimes (surprisingly, he still refers to climes having been only four major Pleistocene glacials and interglacials). Paul again emphasises here how important it is to know the preservation history of a fossil before using it for geological purposes, instancing the danger of diagenetic change altering the oxygen isotope ratios of carbonate skeletons that may be used for palaeotemperature estimations.

Some useful biological background to different types of growth pattern, growth rate and shape changes due to growth (allometry) are given in the chapter on "Growth Studies", which will help geologists to appreciate the functional reasons that underlie variations of this kind. Paul also cautions of the difficulties involved in using fossil growth-ring counts to estimate the number of days in past geological years.

After a straightforward account of the dating and correlation of rocks, using fossils and radioactive methods, Paul goes on to discuss the faunal succession and evolution. After an historical introduction (which leans heavily on Martin Rudwick's work), Paul uses several methods to evaluate the completeness of the fossil record, concluding that it is adequate for most purposes. This leads on to a discussion of the nature of evolution as shown in the fossil record, and here Paul comes down on the side of punctuated equilibria rather than gradualism.

In the last two chapters, Paul surveys theories of the origin of life and the fossil evidence for the early diversification of life. Most of the last chapter is devoted to a review of the problems involved in the transition from an aquatic to a terrestrial existence. The book ends with a selective bibliography of some 130 titles, and an index. The book runs to 292 pages, and includes 81 text-figures and 16 pages of black and white photographs.

Like most of us, Paul is stronger in some areas than in others, and his background as a student of Palaeozoic marine invertebrates leads to a concentration on these organisms as examples of most of his topics, so that there is little on Mesozoic or Cenozoic organisms, especially vertebrates. However, the main point is that the examples he uses are well chosen. He covers his themes well, not being afraid to spend time on non-palaeontological subjects, or on history, if these can be shown to throw light on these themes. He writes clearly and interestingly, and uses vivid metaphors to aid his explanations. The book should certainly be useful to university students, and it is sufficiently attractive and well written to find some market also among non-specialists.

Barry Cox

Barry Cox is professor of zoology at King's College London.

Periglacial illumination

Geocrology: a survey of periglacial processes and environments
by A. L. Washburn
Edward Arnold, £27.50
ISBN 0 7131 6119 1

I have suffered, for many years, from an aversion to periglacial processes and environments. The environments are unpleasant, wet and boggy or roughly bouldery, difficult to traverse and usually infested in summer by mosquitoes. The study of processes has, however, often seemed dryly academic, bogged down by detailed descriptions of small features or arcane processes whose wider implications have not been obvious; and many who have attempted to draw wider inferences have been heavily criticized by their fellow students.

Geocrology, defined as the study of frozen ground excluding glaciers, is for me a light on the Damascus road. Its importance to the present and past of the Earth is considerable, as some 20 per cent of its surface is affected by permanent ground freezing. This not only plays an important role in governing physical, chemical and biological processes, and the overall moulding of the landscape; it critically affects man's building and engineering activities and many other aspects of his life in these regions.

During glacial periods, perennial freezing of the ground extended into currently temperate zones, and many soil characteristics and landscape features in these latitudes result from geocrynological processes. In this book individual processes are analysed physically where possible. Those processes and the multitude of forms to which they give rise are then related to the climatic variables which produce them, and by reversing this relationship, an inquiry is made into the extent to which it is possible to reconstruct past climate from the geological relics of frozen ground structures.

A particularly impressive aspect of the book is the way in which material from very different sources is brought together and synthesized, whether it be in the constructive interplay between field evidence, laboratory experiment and theoretical analysis, or in the synthesis of material from very different geographical areas where linguistic sources. The summary of a great deal of Russian literature is particularly valuable.

There are two striking aspects of the book: the excellence of the illustrations, particularly the diagrams, many of which are new, or much of which are at least redrawn specially for this book; and the way in which it can be used as a dictionary of geocrynological research. A search in this book using its good index for the meaning of a term, or what is known about a particular structure or process, yields a careful and near comprehensive review such that it must give access to an unusually high proportion of the total scientific knowledge in the field.

This densely packed text does not of course lend itself to easy skimming, and is unlikely to be a useful student textbook. However, it must surely become the fundamental reference text for those working in this field, a valuable insight into it for those interested in related topics, and an ideal primer for a teacher as a substitute for first-hand experience. Professor Washburn has built upon the earlier edition of his text to produce an impressive benchmark in geocrynology and periglacial studies, and I suspect many will join me in thanking him for it.

G. S. Boulton

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Bridging a difficult gap

Metal Complexes in Organic Chemistry
by R. P. Houghton
Cambridge University Press, £21.00 and £7.50
ISBN 0 521 21997 2 and 29331 6

I began to read this book with a certain amount of scepticism. The attempt to bridge the disciplines of organic and inorganic chemistry has often been made, but is none the easier for that. It is all too easy to present material as an inorganic chemist and to underemphasize the synthetic organic aspects, or to present a jumble of organic chemistry without the unifying concepts and understanding which the inorganic chemist can bring to bear.

This book, which is aimed at advanced undergraduates and new graduates, as well as at practising organic chemists, avoids both of these pitfalls. The first two chapters outline the basic concepts of complex chemistry. This is done by avoiding too much detail (that is provided by standard texts in inorganic chemistry) and presenting just enough material to enable the reader to understand them and their possible significance when transformations of organic substrates are involved. The author also provides review references on all the major topics for those who require further information.

There are a few infelicities, such as the use of non-IUPAC formalism for molecular formulae, a suggestion that there is such a thing as an actual oxidation state, as opposed to a formal oxidation state and some obscure representations of chemical formula. The discussion of stabilization of reactive species by complexation is a little misguided. There seems no value in talking of [ReCl$_3$ (NMe$_3$) (PEtPh$_2$)] as a nitrene complex rather than as an alkylimido-complex. After all, chlorine atoms are wonderfully stabilized by complexation, and no one is surprised by that. The section on π-donor complexes ignores the classical example of NO, and the geometrical consequences of its coordination as "NO+". There is more one could mention, but these are relatively minor criticisms of two chapters which achieve their stated aims very adequately.

The next three chapters are devoted to a discussion of organic transformations mediated by metal ions; being more detailed, they are less easy to read. They cover at some length an extensive selection of reactions but, for the researcher, suffer from the fact that very few direct references are given. They do quite well, however, in showing the great diversity of effects produced by metal ions.

The subjects dealt with include nucleophilic substitution at saturated and unsaturated carbon atoms, addition reactions to unsaturated organic systems (carbon-carbon, carbon-nitrogen, and carbon-oxygen), and oxidative additions and insertions. The material thus ranges from areas more generally discussed by the organic chemist to those considered the province of the organometallic chemist (for example, hydroformylation, transition metal alkyls, metal-catalyzed alkene isomerations, and homogeneous hydrogenation).

It is doubtful whether such a wide range of material presented in such an accessible and comprehensible fashion has yet appeared. The book is commendably free of errors, and with minor reservations can be recommended both to undergraduates (especially chapters 1 and 2) and, as an introduction to the uses of coordination compounds, to the practising synthetic chemist. I suspect that even coordination chemists will find it stimulating, informative and useful.

G. J. Leigh

G. J. Leigh is at the ARC Unit of Nitrogen Fixation, University of Sussex.

Circuits—the practical and the logical approach

Basic Electronic Circuits
by E. M. Buckley and A. H. Hoskyns
E. & F. N. Spon, £4.95
ISBN 0 419 11420 3

Electronic Logic Circuits
by J. B. Gibson
Edward Arnold, £3.95
ISBN 0 7131 3407 0

These two recent paperback books on electronics cover some of the early development of the subject. *Basic Electronic Circuits* being more elementary than *Electronic Logic Circuits*. They provide an interesting contrast in chosen approach—Buckley and Hoskyns using an intuitive, practical approach with little detailed mathematics, and Gibson, writing for an undergraduate audience, adopting the more conventional theoretical approach to his chosen subject. Both books contain a wide range of tutorial questions, and fully worked solutions being provided by Buckley and Hoskyns.

Both texts help fill a gap in the range available for beginners in these developing developments which is so rapid that radically different approaches can easily be justified. This rapidity of development of electronics also gives rise to the problem that in many ways it is easier to adopt a "system" approach to the subject, leaving the detailed understanding of device operation to a later stage of study. This approach has found a degree of recognition in the Associated Examining Board's "Electronic Systems" syllabus and one unit of the Nuffield Physics Course.

Buckley and Hoskyns, whose book should be helpful in schools, have used some of the ideas inherent in the Nuffield approach, including at least one example using a Nuffield "basic unit", though the sequence of the main body of the text follows the classical development from electricity, through passive components, to active circuits. The relegation of the physics of semiconductors and semiconductor devices before devices. However, the inclusion of germanium transistors in this section can hardly be defended as, without exception, the devices used in the circuits in the main text of the text are silicon types.

The very practical approach of Buckley and Hoskyns, with descriptions of how to assemble circuits, is welcome. Experience in running many basic electronics courses has made it clear that good constructional techniques are essential for early success in practical electronics. This good point must be set against the consistent use of six-volt bulbs in circuits using nine-volt batteries. This over-running of components will shorten their lives with the attendant classroom breakdowns which could lead to frustration on the part of the student.

Gibson's book is quite different in character. Based on courses given to first and second year undergraduates, as the author admits, it is at a significantly higher standard. It deals with the classical methods of logic circuit design but does not spend any significant time on the practical problems of constructing circuits. It adopts a circuit-block approach, which is most convenient when dealing with logic. There is a brief section on circuit properties, but without supplementation it would not be sufficient for the beginner. The existence of a parallel laboratory course would, of course, remove this difficulty.

As an introduction to the basic formal, and rather mathematical, methods of logic circuit design the book is sound and clearly written. It is illustrative of the problem of how to approach electronics that these two books can be reviewed together. In many ways the work on logic circuits could precede the "basic" electronics. The use of integrated circuits largely removes the problem of considering the detailed circuit operation. Digital integrated circuit designers are careful to make sure that provided certain interconnection rules are obeyed, their circuits will operate successfully. Gibson correctly emphasizes the logic, and as such the early parts of this text could be approached far earlier than in the university.

The current development of electronics in schools makes it likely that increasing numbers of young people will become interested in the subject. As their initial approach will perhaps be through logic, Gibson will be a useful, though not comprehensive text. A similar text on the use of operational amplifiers is needed, as well as one on microprocessors. The conceptual difficulties of the physics of the solid state are by-passed by such approaches and the result is probably much more relevant to the person who is not intending to become a specialist. Although Gibson does not set out with this market in mind he may have produced an excellent introductory text for the sixth former who is interested in the field.

Both texts fill a need, and both are reasonably priced. Their differences are significant. The obvious Nuffield approach of Buckley and Hoskyns is already appropriate in schools and will fit in easily. Perhaps ironically the university text might be adaptable to a more developed initial approach to electronics. For a time it will find a place in higher education but it should also be commended to those interested in the earlier stages in education.

A. P. Dorey

A. P. Dorey is senior lecturer in electronics at the University of Southampton.

NOTICE BOARD

Noticeboard is compiled by Patricia Santinelli and Mila Goldie

Chairs

Christopher R. W. Edwards, senior lecturer in medicine and honorary consultant physician, St Bartholomew's Hospital, London, has been appointed to the Mencrieff Arnott chair in medicine at the University of Edinburgh with effect from October 1, 1980.

Professor D. Miller, Lind Lawrence professor of neurological surgery at Virginia Commonwealth University in Richmond and Fellow of the American College of Surgeons, has been appointed to the Forbes chair of surgical neurology at the University of Edinburgh with effect from a date to be arranged.

Professor Dennis H. Pritz has been appointed as a professor of accountancy at the University of Stirling. Previously he has held a number of important academic posts in the United States and in Scotland, where he occupied a chair in accountancy at Glasgow University from 1976 to 1978.

Appointments

Universities

Dundee

Readers, promotion: Dr J. McManus (gerontology); Dr C. J. Naylor (psychiatry); Dr A. W. Park (dental surgery). **Senior Lecturer:** Mrs D. Buchel (social administration); Dr Doreen S. McQueen (biochemistry).

Exeter

Readers: Dr C. A. Brookes (engineering materials); Dr N. I. Orme (history).

Heriot-Watt

Appointments to University Court: Sir Douglas Haddow (representing Government), Councillor D. Drummond Young, Councillor W. G. Rankine, Professor J. L. King.

Hull

Readers: Dr R. W. Walker and Dr S. G. Williamson (chemistry); Dr R. W. Lost (German).

London School of Oriental and African Studies

Members of the Governing Body: Professor Eric Thomas Stokes, Bernard Buckman and Bernard Hughes Farmer (reappointed).

Manchester

Pro-vice-chancellors: Professor P. M. Bromley, Professor D. G. Austin, and Professor J. R. Moore. **Dean:** Dr A. J. Ralston (clinical studies). **Reader:** Dr Brian Robinson (pharmacy). **Senior Lecturers:** Dr J. H. Scraffe (oncology); S. D. Chowdhury and C. D. Costello (urological surgery). **Lecturers:** Barbara J. Pleuvry (anaesthetics and pharmacology); Mrs Valerie E. Newton (audiological medicine); D. G. Wastell (computational methods in medical sciences); Miss Margaret A. Jones (conservative dentistry); Miss Vivien A. Gardner (drama); C. A. P. Binns and A. C. Edwards (government); A. S. Burrows and Martin Wasik (law); A. P. Read (medical genetics); Miss Mary E. Hughes (parent guidance in the department of audiology and education of the deaf). **Staff Officer:** M. A. Buckley. **Senior Administrative Assistant:** P. S. Mitchell (Registrar's department).

Newcastle upon Tyne

Headships: Professor R. V. Thompson (head of the School of Marine Technology); Professor J. B. Goddard (head of the department of geography); Dr J. A. Anderson (statistics). **Deputy Head:** Dr W. O'Reilly (deputy head of the school of physics). **Emeritus professors:** Professor E. J. Field (experimental neuropathology); Professor G. N. Jenkins (oral physiology); Professor E. L. J. Potts (mining engineering); Professor K. Rowntree (fine art); Professor G. S. Rushbrooke (theoretical physics); Professor H. R. Thirsk (electrochemistry). **Senior Lecturers:** Dr P. H. Baylis (general medicine and endocrinology); R. R. Hall (urological surgery); Dr A. R. Nicol (child psychiatry). **Lecturers:** Dr H. Molsi (English language); Dr J. Callaghan (pathology); Lt-Cdr C. R. Allen (electrical and electronic engineering).

Reading

Sub-Dean of the Faculty of Letters and Social Science: Miss Eva P. Leman.

Stirling

Senior Lecturers: Dr D. M. Bryant (biology); O. J. Karolyi (music); J. P. Lehmann (history); R. A. Bell (philosophy); Dr R. J. Ruffell (economics). **Lecturer:** J. M. Hulley (telecommunications).

Bradford

Director of the Microprocessor Application Centre: Professor J. E. Shannons. **Reader:** Dr J. Salter (civil engineering). **Senior lecturers:** Dr D. England and J. A. Smith (pharmaceutical chemistry); J. Majumdar (project planning centre). **Lecturers:** R. N. Hausner (German studies); R. Wadsworth (physics). **Honorary visiting research fellows:** A. J. Bonner and Dr E. Green and P. E. Wood (postgraduate school of studies in industrial technology); J. G. E. Gidney (postgraduate school of studies in industrial technology). **Honorary visiting senior research fellow:** E. Cabrel, (postgraduate school of studies in industrial technology). **Honorary visiting fellow:** Dr Maria Elena Lechinsky (pharmaceutical chemistry). **Honorary visiting lecturer:** Dr Elmo Cocuzzi (biological sciences); Dr L. Mihas (applied social studies).

Open University programmes August 2 to August 8

Saturday August 2

BBC 1
7.15 Issues and Information: The Surgical Mind: A Case Study (B3204, prog 12).
7.40 Man in Nature Quest: Alaska: The Playing People (AD300, prog 12).
8.05 Linear mathematics: Rigid Transformations (B201, prog 24).

BBC 2
7.40 History of mathematics: Words from Old (AM290, prog 8).
8.05 Twentieth century drama: The Game of Knowledge: The Poetry of W. H. Auden (A263, prog 12).
8.30 Arts foundation course: Industrial Landscape: The Yorkshire Woollen Industry (A101, prog 24).
8.55 Cognitive psychology: Solving the Problem (B363, prog 12).
9.20 Schooling and society: Phonics 8: A Community in Search of Itself (A304, prog 8).
9.45 The handicapped person in the community: Learning Together (B251, prog 8).
10.10 The early Roman Empire: The Establishment in Britain (A201, prog 6).
10.35 Operation Politics: Politics and Oil: What Options? (B282, prog 6).
11.00 Earth science: Topics and methods (Set 1) (B538, prog 1).
Earth science: Topics and methods (Set 1) (B538, prog 1).
11.25 Lech Lomond Elevation (B337, prog 1).
11.50 Biochemistry and molecular biology: Immunology (1): An Overview (B323, prog 1).
12.15 Personality and learning: Education in Childhood (B361, prog 10).
12.40 Fundamentals of human geography: The Diffusion of Dutch Elm Disease (B205, prog 12).
13.05 Quantum theory and atomic structure: The Atomic Clock (B303, prog 8).
13.30 The handicapped person in the community: The Family: Network (B251, prog 8).
13.55 Fundamentals of statistical inference: Decisions and Inferences (A361, prog 8).
14.20 Introduction to pure mathematics: Introduction to analysis and topology (A824, prog 24).
Axioms (A812, prog 19).
Axioms (A812, prog 19).
Alternative broadcasts for Radio Scotland and Radio Cymru areas
5.05 Man's religious quest: A Humanist Testimony (D301, prog 12).
5.15 Introduction to phenomenological philosophy (D305, prog 12).
6.35 Music (M).

RADIO 3 (VHF)
6.00 Education and the urban environment: Crunch up in two Minds (E242, prog 7).
6.20 Social work: Community work and society: Social and Political Context (D208, prog 12).
6.40 Communication and society: Systems Analysis and Design (D203, prog 12).
7.00 Patterns of inequality: Political Independence and India: Continuity (D304, prog 24).
7.20 Arts foundation course: Mars, Fields and Manchester (A101, prog 24).
7.40 Mathematics foundation course: Foundation Maths 12 (M101, prog 12).

RADIO 4 (VHF)
Not on Radio Cymru and Radio Scotland
6.00 Music (M).
6.20 Open Forum 24.
6.30 Understanding statistical inference: Decisions and Inferences (A361, prog 8).
6.55 Arts foundation course: Industrial Landscape: The Yorkshire Woollen Industry (A101, prog 24).
10.15 Twentieth century drama: Noise at Night (B2A, prog 11).
11.20 The Health Education Council: Health Education Policy and development.
11.40 The National Geography Project (B200, prog 1).
12.00 Decision making in Britain: Leaders of Industry (B301, prog 10).
12.20 Music (M).
12.40 Operations politics and foreign policy: The Growth of Europe.
14.40 Social revolutions: Social Aims: Liberty and Equality (D308, prog 12).
15.00 The environmental Centre: Fish and Boundary (A), Fish (D2072, prog 8).
15.20 Counselling development: Innovation and thinking from birth to adolescence (D262, prog 7).
15.40 Open Forum: Oil and other mining.
16.00 Open Forum: Oil and other mining.
16.20 The development of instruments and their music: Baroque and the Modern Music: Baroque (A304, prog 12).
16.40 Bereavement: Bereavement (D2071, prog 8).
17.00 Great Britain and the Wider World: Britain and the Wider World: A New Elite (A401, prog 13).

RADIO 4 (VHF)
Not on Radio Cymru and Radio Scotland
17.00 Problems and philosophy: Wittgenstein and Language (A305, prog 12).
17.20 Twentieth century drama: Noise at Night (B2A, prog 11).
17.40 The Historical Approach (B297, prog 11).
Alternative broadcasts for Radio Scotland and Radio Cymru areas
23.30* Product analysis and design: Design Analysis (D301, prog 12).
23.50* Modern art from 1848 to the present: Styles and social implications: Realism and Everyday Design (A324, prog 12).

RADIO 3 (VHF)
Alternative broadcasts for Radio Scotland and Radio Cymru areas
24.00 International politics and foreign policy: The Council of Europe (B238, prog 12).
00.30* Open Forum 24.
00.40* Open Forum 24.

RADIO 4 (VHF)
Recent Radio Scotland (7.15 to 8.15 am) and Radio Cymru (7.15 to 7.55 am)
7.15 The control of education in Britain: Given Children: Incorporated or Integrated? (B362, prog 8).
7.35 Drama: Drama and Society (A307, prog 10).
7.55 Man's religious quest: A Humanist Testimony (AD308, prog 12).
8.15 The sociological perspective: Religion, Ideology and Reformation (D303, prog 12).
8.35 Modern art from 1848 to the present: Styles and Social Implications: Realism and Everyday Design (A324, prog 12).
9.15 Twentieth century drama: Reformation Studies (A201, prog 23).
9.35 The Aztec Explosion of the Reformation (A201, prog 6).
9.55 Technology foundation course: The Technology foundation course.
10.15 Conflict and stability in the developing world: Conflict and Stability (A700, prog 12).
10.35 Perspective (1) (A300, prog 12).

RADIO 3 (VHF)
24.00 Complex analysis: Uniform Convergence (MD72, prog 6).
00.20 History of architecture and design 1660 to 1900: Project One Study (D2, prog 1).
00.40* Communication and society: The James Bond Formula (DE303, prog 12).

Sunday August 3

BBC 1
7.15 Genes and development: Genes and Development (B23-5, prog 1).
7.40 The early Roman Empire and the rise of Christianity: The Establishment in Britain (A201, prog 7).
8.00 Earth science topics and methods (Set 2).
Earth Science Topics and Methods (Set 2) (B538, prog 2).
Loch Lomond Elevation (B336, prog 2).
8.25 An introduction to materials: The Gas Bottle Prop, Wood to Steel (B321, prog 11).
8.50 Computing and computers: Systems Analysis (D201, prog 9).

BBC 2
7.40 Making sense of society: Caring Cities (D101, prog 26).
8.05 Biology foundation course: Evolution of Cells (B101, prog 1).
8.30 Mathematics foundation course: Counting Numbers (A101, prog 24).
8.55 Technology foundation course: A Multi Pin Plug (T101, prog 12).
9.20 Images and information: The Surface of Objects: A Case Study (E323, prog 12).
9.45 Society: Alienation: A Limestone Valley (D223, prog 1).
10.10 Introduction to electronics: Digital Systems (T246, prog 7).
10.35 Introduction to pure mathematics: Partitions (A824, prog 12).
11.00 Introduction to pure mathematics: Complex Vectors (A824, prog 15).
11.25 Mathematics foundation course: Rational Numbers (A101, prog 25).
11.50 Open University: Community work and society: Community on Probation (D209, prog 12).
12.15 Electroencephalogram systems: Telemetry (B256, prog 6).
12.40 Introduction to mathematics: Integrals (A824, prog 16).
13.05 Introduction to pure mathematics: Rational Numbers (A824, prog 16).
13.30 Introduction to pure mathematics: Series (A824, prog 17).

RADIO 3 (VHF)
6.00 Educational aids and the social relation: No Safety in Numbers (D301, prog 1).
6.20 The handicapped person in the community: Work Preparation and Further Education (D251, prog 8).
6.40 Personality and learning: Learning Cultural Studies 7 (E201, prog 7).
7.00 Nation state of society: Caring Cults (D101, prog 26).
7.20 The origins of chemistry: Organic Chemistry: Alkanes, Petroleum and a Marine Plant (E202, prog 13).
7.40 Open Forum: Music Electronic Analysis (A261, prog 12).

RADIO 4 (VHF)
Recent Radio Scotland (7.15 to 8.15 am) and Radio Cymru (7.15 to 7.55 am)
7.15 The control of education in Britain: Given Children: Incorporated or Integrated? (B362, prog 8).
7.35 Drama: Drama and Society (A307, prog 10).
7.55 Man's religious quest: A Humanist Testimony (AD308, prog 12).
8.15 The sociological perspective: Religion, Ideology and Reformation (D303, prog 12).
8.35 Modern art from 1848 to the present: Styles and Social Implications: Realism and Everyday Design (A324, prog 12).
9.15 Twentieth century drama: Reformation Studies (A201, prog 23).
9.35 The Aztec Explosion of the Reformation (A201, prog 6).
9.55 Technology foundation course: The Technology foundation course.
10.15 Conflict and stability in the developing world: Conflict and Stability (A700, prog 12).
10.35 Perspective (1) (A300, prog 12).

RADIO 3 (VHF)
24.00 Complex analysis: Uniform Convergence (MD72, prog 6).
00.20 History of architecture and design 1660 to 1900: Project One Study (D2, prog 1).
00.40* Communication and society: The James Bond Formula (DE303, prog 12).

Monday August 4

BBC 1
6.40* Business concerning: Evaluating a Business (B2, prog 1).
7.05 News communication and society: News Communication (B2, prog 1).
7.30 Decision-making in Britain: Out of Office: Ministers of Mind (B301, prog 11).

BBC 2
5.40 Seasons injection: Sheep Production (B2, prog 1).
7.05 Foundation foundation course: Science (Numeracy) (M101, prog 2).
7.30 Foundation foundation course: A Science (Numeracy) (M101, prog 2).
8.55 Introduction to electronics: Digital Systems (T246, prog 7).

RADIO 3 (VHF)
6.20 History of architecture and design 1660 to 1900: Project One Study (D2, prog 1).
6.40 Drama: Drama and Society (A307, prog 12).
7.00 The digital computer: The Microprocessor in a Laboratory: A Case Study (T223, prog 7).
7.30 Making sense of society: Caring Cults (D101, prog 26).
8.35 Multinational capital and public policy: Is Music Noise? (T2372, prog 6).

RADIO 4 (VHF)
8.00 Patterns of inequality: Political Independence and India: Continuity (D304, prog 24).
8.20 The rise of modernism in music: Stravinsky: Chaos Ice, Ice Fire: Fourth Symphony (A208, prog 11).
8.40 Computing and computers: Systems Analysis (D201, prog 9).
9.00 Science foundation course: Metabolic Pathways (B101, prog 12).
9.20 Social psychology: Social Skills: An Introduction (D303, prog 12).
9.40 Social psychology: Social Skills: An Introduction (D303, prog 12).
10.00 Technology foundation course: The Costs of Oil (T102, prog 12).
10.20 Cognitive development: Language and thinking from birth to adolescence (D262, prog 12).
10.40 Open Forum: Oil and other mining.
11.00 Open Forum: Oil and other mining.
11.20 The development of instruments and their music: Baroque and the Modern Music: Baroque (A304, prog 12).
11.40 Complex analysis: Analytic Functions (MD32, prog 8).

RADIO 3 (VHF)
6.00 Practice: Irritability and Violence (E232, prog 12).
6.20 Mechanics and molecular biology: Cell Function and Control (B323, prog 2).
6.40 Mechanics and molecular biology: Cell Function and Control (B323, prog 2).
7.00 Technology foundation course: The Impact of Technology on Society (T103, prog 12).
7.20 Technology foundation course: Technology and Education (T103, prog 12).
7.40 Open Forum: Music Electronic Analysis (A261, prog 12).

RADIO 4 (VHF)
Alternative broadcasts for Radio Scotland and Radio Cymru areas
22.30* Technology foundation course: The Costs of Oil (T102, prog 12).
23.00* Cognitive development: Language and thinking from birth to adolescence (D262, prog 12).
23.20* Cognitive development: Language and thinking from birth to adolescence (D262, prog 12).
23.40* Nursery education: Nursery Education (E262, prog 1).
00.00* Introduction to pure mathematics: Pure Mathematics (A824, prog 8).
00.20* Introduction to pure mathematics: The Complex Number (A824, prog 9).
00.40* Introduction to pure mathematics: Pure Mathematics (A824, prog 8).
01.00* Introduction to pure mathematics: The Complex Number (A824, prog 9).
01.20* Introduction to pure mathematics: Pure Mathematics (A824, prog 8).
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01.60* Introduction to pure mathematics: Pure Mathematics (A824, prog 8).
01.80* Introduction to pure mathematics: The Complex Number (A824, prog 9).
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21.20* Introduction to pure mathematics: Pure Mathematics (A824, prog 8).
21.40* Introduction to pure mathematics: The Complex Number (A824, prog 9).
21.60* Introduction to pure mathematics: Pure Mathematics (A

Classified Advertisements Index

Appointments vacant
Universities
Fellowships & Studentships
Polytechnics
Technical Colleges
Colleges and Institutes of Technology
Colleges of Education
Colleges of Further Education
Colleges and Institutes of Higher Education
Colleges and Departments of Art
Research Posts
Administration
Overseas
Adult Education
Librarians
General Vacancies
Official Appointments
Appointments wanted
Other classifications
Awards
Announcements
Exhibitions
Personal
Courses
Holidays and Accommodation

Universities

THE UNIVERSITY OF NEW ENGLAND
PROFESSOR OF EDUCATIONAL ADMINISTRATION

Applications are invited for appointment to a Chair of Educational Administration. This Chair has become vacant as a result of the appointment of Professor W. G. Walker as Principal of the Australian Administrative Staff College. The appointee will become Head of the Centre for Administrative Studies for a period of five years in the first instance. The Centre is one of four within the Faculty of Education.

The Centre has an international reputation for its postgraduate programmes in school system educational administration, which it offers to both internal and external students. It edits and publishes the journal of Educational Administration, houses the secretariat of the Commonwealth Council for Educational Administration, provides services in Australia and abroad through the Institute for Higher Education, and is active in other ways in overseas aid programmes.

The current professorial salary is $A35,654 per annum.

The University will pay travel expenses for the appointee and family, benefits include superannuation (FSBU pattern or the S.U.W. State superannuation Scheme) and assistance in obtaining finance for building or buying a home. The appointee will be eligible to apply for study leave with appropriate travel grants.

Informal enquiries may be directed, in the first instance to the Dean, Faculty of Education at the University.

Closing Date : 31 August, 1980.

Position No 547

Applications, including the names and addresses of three referees and stating the position No. should be sent to the Staff Officer, The University of New England, Armidale, New South Wales, 2351, Australia, prior to the closing date. Applicants in the United Kingdom, Europe and America should also forward a copy of their applications to the Secretary General, Association of Universities (Appts.), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment and application forms can be obtained.

UNIVERSITY OF LONDON
Institute of Education
and Schools Council for
Curriculum and Examinations

Chair of Education with special reference to Curriculum Studies

Applications are invited for appointment to a Chair of Curriculum Studies, tenable at the Institute of Education. The person appointed will be seconded by the Institute to the Schools Council to be the Council's Director of Studies. These duties will occupy about four-fifths of the holder's time, and duties at the Institute one-fifth. The Director of Studies will oversee the Council's programmes of research and evaluation, and will be expected to contribute to developments in curriculum and examinations in which the Council expects to play a major part in the eighties.

Applications (10 copies) should be submitted to the Academic Registrar (THES), University of London, Malet Street, London WC1E 7HU, no later than Wednesday, August 27, 1980. Telephone for further particulars 01-636 8000, extension 202 or 305.

UNIVERSITY OF CAPE TOWN
SPECIAL ASSISTANT TO THE VICE-CHANCELLOR

The University has established this post in view of the challenges and tensions that arise from its position as an African and South African institution and its setting within a divided society. The person appointed to the post will advise the Principal on policy and action relating to the special problems and issues involved in the admission of black students. VCT's role in contributing to equal educational opportunities for all, and its contribution to the country's social development. Applications and nominations of individuals who might be considered for the post are invited. The salary scale will be R17,100 x R750-R18,600 x R000-R22,200, and an annual bonus equal to one month's salary is payable.

Applicants should submit a curriculum vitae stating present salary, the date when available to assume duties if appointed, and the name and address of three referees. Nominations need include only the name and address of the nominee.

Further information should be obtained from the Registrar, Room 10, Bremner Building, University of Cape Town, Private Bag X3, Rondebosch 7700, South Africa, by whom applications should be received not later than 15th September, 1980.

The University's policy is not to discriminate in the appointment of staff or the selection of students on the grounds of sex, race, religion or colour. Further information on the implementation of this policy is obtainable from the Registrar.

University College of Swaziland

Applications are invited for the post of

PROFESSOR OR ASSOCIATE PROFESSOR OF EDUCATION

Applicants should hold a PhD in an academic field of Education, preferably in some separate area in the administration of Education. The senior post is in Educational Foundations and Management where the appointee will provide academic leadership in research, design, implementation and evaluation of all programmes within the Faculty of Education.

Salary scales : Professor E10,020-E13,020 per annum. Associate Professor E8,020-E12,020 per annum (E1 equals £1.81). The Swaziland Government may provide some supplementation in range to E6,000 per annum (depending on family circumstances). Two or four year contract. Gratuity in lieu of superannuation : independent allowance of 30% on basic salary payable to those not qualifying for superannuation : education allowance : medical scheme : rent accommodation : family passages : biennial overseas leave. Detailed applications (3 copies) including a curriculum vitae and stating 3 referees should be sent to the Registrar, University College, PO Box 43844, Nairobi, Kenya, to arrive no later than 3 September 1980. Applicants resident in U.K. should also send one copy to Inter-University Council, 36/37 Tottenham Court Road, London W1P 0DT. Further details are obtainable from either address.

UNIVERSITY OF LONDON
LECTURER IN JURISPRUDENCE
(INCLUDING COMPARATIVE LAW)

Applications are invited from suitably qualified persons for a vacant Lectureship in the Department of Jurisprudence. The successful applicant will be expected to contribute to the teaching of courses in Comparative Law at Ordinary and Honours Degree level and for other teaching duties within the department, and will be expected to have and pursue appropriate research interests.

Salary scale £6,063 to £10,464 with point of entry depending on qualifications and experience. Superannuation under USS. Greater London's removal expenses to Outside.

Applications (six copies) or, if submitted from overseas, one copy) containing full career details, and the names of three referees should be lodged by Friday, 12 September 1980 with the Secretary, The University, Dundee DD1 4HN, from whom further particulars are available. Please quote reference ES7/80/60.

PRIFYSGOL CYMRU UNIVERSITY OF WALES

Appointment of Registrar

In view of the forthcoming retirement of the present Registrar, applications are invited for the post of Registrar of the University of Wales from 1 October, 1981, or such earlier date as may be arranged. The salary will be within the professorial range operating at that time.

The closing date for applications is 15 September 1980.

Particulars relating to the post may be obtained from the Vice-Chancellor, University of Wales Registry, King Edward VII Avenue, Cathays Park, Cardiff CF1 3NS. All letters should be marked "Appointment—Strictly Confidential".

Coláiste na hOllscoile Corcaigh
University College Cork

DAIRY AND FOOD ECONOMICS

Applications are invited for a Temporary Full-Time post as Assistant Lecturer/College Lecturer in the Department of Dairy and Food Economics for the session 1980/81.

Applications will be particularly welcome from candidates with interest or experience in :

Food Marketing
or
Agribusiness Management

Salary within range £6,453 to £11,063 per annum depending upon qualifications and experience.

Curriculum vitae together with the names of three referees should be submitted by Monday, 1 September, 1980, to Professor D. I. F. Lucey, University College, Cork, Ireland.

Kenyatta University College—Kenya

Applications are invited for the post of

LECTURER IN DEPARTMENT OF ZOOLOGY

Applicants should be holders of a second degree, preferably a Ph.D. together with experience in university teaching. Applications will be considered from persons specializing in areas of Zoology. But preference may be given to those with Marine Biology or Ichthyology as their areas of specialisation. Appointee will be expected to teach undergraduate and to participate in research and other academic activities.

Salary scale : KE2,016-KE3,312 per annum, (KE1 equals £1.40 sterling). In very limited cases, the British Government may provide salary supplementation in range £4,156-£7,044 per annum (sterling) (reviewed annually—normally twice) and associated benefits. Family passages : subsidised housing : SSBF or FSSU : non-contributory medical aid scheme.

Detailed applications (2 copies) including a curriculum vitae and naming 3 referees should be sent to the Registrar, Kenyatta University College, PO Box 43844, Nairobi, Kenya, to arrive no later than 3 September 1980. Applicants resident in U.K. should also send one copy to Inter-University Council, 36/37 Tottenham Court Road, London W1P 0DT. Further details are obtainable from either address.

University of the West Indies Trinidad

Applications are invited for the post of

ASSISTANT REGISTRAR

Applicants will be assigned to the Registrar's Office, Mona Campus, Jamaica, and will be responsible for administrative work in the University.

Salary scale (Jamaican currency) J$7,500-J$8,700-J$9,900-J$11,100-J$12,300-J$13,500 (J$1 equals £0.60 sterling) (1980-81).

Unfurnished accommodation, housing allowance, passages, Study and Travel Grant.

Detailed applications (6 copies) including a curriculum vitae and naming three referees should be sent to the Registrar, University of the West Indies, Mona, Kingston 7, Jamaica. Applicants resident in U.K. should also send one copy to Inter-University Council, 36/37 Tottenham Court Road, London W1P 0DT. Further details are available from either address.

EDINBURGH
HERIOT-WATT UNIVERSITY
LECTURER
DEPARTMENT OF MECHANICAL ENGINEERING

Applications are invited for appointment to the above post in the Department of Mechanical Engineering. The successful applicant will be expected to contribute to the teaching of courses in Computer Aided Design at Ordinary and Honours Degree level and for other teaching duties within the department, and will be expected to have and pursue appropriate research interests.

Salary will be in the range £6,063 to £10,464 per annum.

Application forms and further details may be obtained from the Staff Officer, Chambers Street, Edinburgh EH1 1HX, quoting reference number 56/80.

Universities continued

UNIVERSITY OF THE SOUTH PACIFIC

Applications are invited for the post of

SENIOR LECTURER/LECTURER IN MATHEMATICS (STATISTICS)

(Post 60/66) tenable from January 1981. Applicants should have postgraduate qualifications in Statistics or Operations Research with a good record of university teaching, research and consultancy. The University is seeking a person who is able to teach Statistics and related subject areas at all undergraduate levels to internal students and to develop courses for extension (external) students. Salary scale : Senior Lecturer F$13,287-F$16,506 per annum. Lecturer F$9,189-F$12,852 per annum (£1 sterling equals F$1.01). The University has a small number of positions within its establishment for which the British Government provides supplementation payments. The present pensionable service on such terms is and is offered on local terms and conditions only. Gratuity : superannuation contribution : appointment allowance : low rental partly furnished accommodation : 3 year contract (renewable).

Detailed applications (2 copies) including a curriculum vitae and naming 3 referees should be sent to the Registrar, University of the South Pacific, P.O. Box 1168, Suva, Fiji, to arrive no later than 20 August 1980. Applicants resident in U.K. should also send one copy to Inter-University Council, 36/37 Tottenham Court Road, London W1P 0DT. Further details are obtainable from either address.

CARDIFF
UNIVERSITY COLLEGE

Applications are invited for a TUTORIAL FELLOWSHIP in the FACULTY OF LAW (PUBLIC or SOCIAL) POSTS, tenable for a three-year period in the Department of Jurisprudence and Financial Control, Economics, Industrial Relations and Management Studies and Psychology. Social Administration and Law. Salary scale £4,603 to £5,662 per annum, £6,063 to £10,464 per annum.

Applicants (two copies) together with the names and addresses of two referees, should be forwarded to the Registrar (Staff Administration), Old Main Building, Cathays Park, P.O. Box 78, Cardiff CF1 1XL, from whom further particulars will be obtained. Quote reference 207/80.

DURHAM
THE UNIVERSITY
RESEARCH ASSISTANT IN SOCIAL ANTHROPOLOGY

Applications are invited for the post of RESEARCH ASSISTANT in SOCIAL ANTHROPOLOGY to work on a recently funded project on Alternative Enterprise for Young Adults.

The post will involve interviewing young unemployed and postgraduate students of anthropology and statistics as well as service training to undergraduates in the Faculties of Science and Applied Science. The successful candidate will be expected to develop his/her research interests in the subject and to assist in the Statistical Advisory Service. Preference may be given to those interested in Applied Statistics.

Salary on the scale for Research Assistants £4,603 to £10,464 (under review) according to age, qualifications and experience.

Informal enquiries may be made to Professor J. Clyde Mitchell (telephone 0632 — 43731, extension 4376 or 4441).

Application forms and further particulars may be obtained from the Registrar, The University, Durham DH1 3HP, from whom further particulars may be obtained. Please quote reference EST 68 100.

JOHANNESBURG
UNIVERSITY OF THE WITWATERSRAND
DEPARTMENTS OF LIBRARIANSHIP AND INFORMATION SCIENCE
SENIOR LECTURER/LECTURER

Applications are invited from suitably qualified persons, regardless of sex, race, colour or national origin, for appointment to the above posts.

The senior lectureship is available for filling from September 1980, whereas the lectureship, which will be filled on a three-year contract basis, is available from January 1, 1981.

Salaries will be within the ranges R[illegible] to R[illegible] per annum (Senior Lecturer) and R[illegible] to R[illegible] per annum (Lecturer) (1 R1.14 approximately).

The initial notch and level of appointment will be determined according to the qualifications and experience of the successful candidate. An annual service bonus in accordance with existing Government regulations is also payable and will be paid at the rate of 2.08 per cent of one month's salary per year.

Intending applicants should obtain the information sheet relating to these posts from the Joint Appointments Committee, University of the Witwatersrand, Diderick Street, PO Box 1176, Johannesburg 2000, Transvaal, Republic of South Africa, University of the Witwatersrand, Jan Smuts Avenue, Johannesburg, South Africa, by whom applications should be lodged not later than August 15, 1980.

LONDON
University of
QUEEN ELIZABETH COLLEGE
Kensington
DEPARTMENT OF PHYSICS
POST-DOCTORAL RESEARCH ASSISTANT

Applications are invited for a post tenable for up to 18 months (subject to renewal) in the Research Council. The successful applicant will be required to assist in the operation of a Van de Graaff Accelerator.

The successful applicant will gain a thorough working knowledge of all aspects of cell mobility, and will be involved in the recording of movements of microorganisms using high speed video and microcinematography techniques. The results will be analysed with on-line computer facilities and correlated with electron microscopic observations to obtain information about microtubular events which are responsible for movement in eukaryotic cells.

Starting salary in the range £[illegible] to £[illegible] per annum, plus superannuation.

Applications, giving the names of two referees, should be addressed to Mr. Pinfold, Physics Department, Queen Elizabeth College, Campden Hill Road, Kensington, London W8 7AH.

EXETER
THE UNIVERSITY
DEMONSTRATOR IN ENGINEERING SCIENCE

Applications are invited for the above post from October 1980, for two years. The successful candidate will be required to assist mainly with laboratory experiments, processes, control and thermofluids courses, and to undertake duties of the demonstrator, as well as other duties which attract salary scale.

The salary will be in the range £4,603 to £10,464 per annum (Grade 1A) on a scale rising to £[illegible] per annum in the second year.

Further particulars may be obtained from Mrs. Gibson, Secretary, Physical Engineering, Exeter EX4 4QF, to whom applications should be sent by 31st August 1980, quoting reference number 17/A.

CARDIFF
UNIVERSITY COLLEGE
TWO LECTURERS AND TWO TEMPORARY LECTURERS

Applications are invited for the following posts in the DEPARTMENT OF PHYSICS, ELECTRONICS and ELECTRICAL ENGINEERING :

A number of lectureships in electronics, electronic materials and applied physics, with a specialism in one of the following areas : microprocessors, optoelectronics, optronics, robot control.

Salary ranges : £6,063 to £10,464 per annum.

Duties to commence October 1980 or as soon as possible.

Applications (six copies) together with the names and addresses of two referees, should be addressed to the Registrar (Staff Administration), Cathays Park, Cardiff CF1 3AT, from whom further particulars may be obtained. Quote reference 206/80.

EDINBURGH
HERIOT-WATT UNIVERSITY
LECTURER
DEPARTMENT OF MECHANICAL ENGINEERING

Applications are invited for appointment to the above post in the Department of Mechanical Engineering. Lecturer will be expected to teach undergraduate courses in the Mechanical Engineering Degree and Diploma in Technology courses, and to undertake research in the field of Control Engineering.

Salary scale : £6,063 to £10,464 per annum.

Application forms and further details may be obtained from the Staff Officer, Chambers Street, Edinburgh EH1 1HX, quoting reference number 56/80.

LEEDS
THE UNIVERSITY
DEPARTMENT OF STATISTICS

Applications are invited from suitably qualified candidates with a good honours degree and preferably interests in statistics for the post of LECTURER in the above Department, available for appointment from 1 January or as soon as possible thereafter.

The post will involve lecturing to both undergraduate and postgraduate students of mathematics and statistics as well as service teaching to undergraduates in the Faculties of Science and Applied Science. The successful candidate will be expected to develop his/her research interests in the subject and to assist in the Statistical Advisory Service. Preference may be given to those interested in Applied Statistics.

Salary on the scale for Lecturers £4,603 to £10,464 (under review) according to age, qualifications and experience.

Informal enquiries may be made to Professor J. Gani (telephone 0532 — 43751, extension 4376 or 4441).

Application forms and further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting the job reference Academic 32/80.

LONDON, WC2
LONDON SCHOOL OF ECONOMICS
INDUSTRIAL RELATIONS DEPARTMENT

RESEARCH ASSISTANT required to work on a comparative industrial relations project on employers' hiring practices and unemployment. The main responsibilities will be interviewing senior executives and personnel managers in two local labour markets. The appointment will be for one year in the first instance. The successful candidate will have a good first degree preferably in industrial relations or economics and preferably some industrial experience.

Salary will be on the scale to £5,663 per annum (Diploma or equivalent) or £6,063 per annum (Ph.D. or equivalent).

Applications, forms and further details from Assistant Personnel Officer, Room 1.04, Houghton Street, London WC2A 2AE, closing date August 1st.

LONDON
THE UNIVERSITY
BIRKBECK COLLEGE
RESEARCH OFFICER

to work part time (all night) for one year only on survey of Chinese Medicine. Suitable and likely candidate for higher level research degree in Chinese Medicine (Subject financed by conversion of Medical Research Council to Master of Birkbeck College).

Salary within range £3,000-£3,[illegible] (£[illegible] per annum) London Weighting.

Apply with full curriculum vitae to Administrative Secretary, Birkbeck College, Malet Street, London WC1E 7HX (quoting ref. 3/80).

MIDDLESEX
BRUNEL UNIVERSITY
DEPARTMENT OF PRODUCTION TECHNOLOGY
LECTURESHIP IN CLOTHING TECHNOLOGY (Male)
(Second advertisement.)

Applications are invited for the above post which the university intends to fill at an early date.

The department is developing a new programme of undergraduate teaching which is submitted to the Polytechnic and National Products Industry Training Board.

The successful candidate will have an opportunity to make a considerable contribution to this area, with associated laboratory project and research work.

Applicants should have an appropriate first degree with, preferably, industrial and/or industrial experience associated with garment manufacture. A knowledge of textile technology and clothing and testing would be advantageous.

Salary scale £5,063 to £10,464, plus £[illegible] London allowance.

Application forms and further particulars about the post can be obtained from the Establishment Secretary, Brunel University, Uxbridge, Middlesex UB8 3PH (or telephone Uxbridge 37188, extension 2).

Closing date: August 20, 1980.

Intending candidates are invited to discuss informally with Mr. F. H. Bateman (extension 2422) at the university.

NEW ZEALAND
UNIVERSITY OF OTAGO
DUNEDIN
LECTURER/SENIOR LECTURER IN MANAGEMENT

Applications are invited for the position of Lecturer or Senior Lecturer in Management within the Department of Management. A candidate should possess good qualifications and have research and teaching experience in one or more of the following areas : Industrial Relations, Organizational Behaviour, Personnel Management, Research Methodology, Strategic Management, Management Information Systems, Management Accounting, Marketing Management, Operational Behaviour.

Salary : Lecturer $[illegible] to $[illegible] per annum. Senior Lecturer $[illegible] to $[illegible] per annum, with a bar at $[illegible].

Further particulars are available from the Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, quoting reference number 51/80.

LIVERPOOL
THE UNIVERSITY
DEPARTMENT OF MUSIC

Applications are invited for the post of LECTURER in the Department of Music.

Preference will be given to candidates with specialist interests in music since 1945 and in the teaching of original composition.

The post is tenable from October 1980.

Initial salary within the range £[illegible] to £[illegible] per annum on a scale rising to £[illegible] per annum.

Applications, together with the names of three referees, should be received not later than August 30, 1980 by the Registrar, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref. 17/80/D.

LIVERPOOL
THE UNIVERSITY
DEPARTMENT OF ECONOMICS

Applications are invited for the post of LECTURER in the Department of Economics.

Applicants who are invited for interview will be asked to indicate their preferences with a second, background in economics, and with research interests in one of the following areas : Industrial Economics, Industrial Relations and Industrial Sociology.

The initial salary will be within the range £5,063 to £10,464 per annum on a scale rising to £[illegible] per annum.

Applications, together with the names of three referees, should be received not later than August 30, 1980 by the Registrar, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref. 16/80.

NEW ZEALAND
UNIVERSITY OF WAIKATO
DEPARTMENT OF MANAGEMENT STUDIES
(Initial Advertisement)

The Department of Management invites applications for a lecturer in management studies. Preference will be given to the appointee in the department's main areas of interest, which are organizational behaviour and industrial relations.

The appointee will have appropriate academic qualifications, and other interest and/or practical experience in the field of high academic attainment and teaching excellence. A teaching ie to be conducted in the context of an integrated management of Management Studies concentration of qualifications in general management or in another functional area of discipline related to management (broadly defined) will be sought in making the appointment.

The current salary range for lecturers is NZ$[illegible] to NZ$[illegible] per annum and for senior lecturers NZ$[illegible] per annum.

Application forms and further particulars may be obtained from the Registrar, The University of Waikato, Private Bag, Hamilton, New Zealand, quoting the job reference number.

Applications close on August 29, 1980.

NEW ZEALAND
UNIVERSITY OF OTAGO
Dunedin
LECTURER OR ASSISTANT LECTURER IN EDUCATION (SOCIOLOGY OF EDUCATION)

Applications are invited from suitably qualified persons for the above mentioned position in the Department of Education.

Applicants should have a good first degree, preferably in education, and a postgraduate qualification in the sociology of education.

Salary : Lecturer $[illegible] to $[illegible] per annum. Assistant Lecturer $[illegible] to $[illegible] per annum, with a bar at $[illegible].

Further particulars are available from the Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, quoting reference number 52/80.

NEWCASTLE UPON TYNE
THE UNIVERSITY
THE LANGUAGE CENTRE

Applications are invited for a Research Assistantship (suitable for only one year from September 1980).

Candidates should be qualified by training and experience to share the teaching of English to overseas students.

Salary will be at an appropriate point on the Lecturer's scale : £5,063 to £10,464 plus London Weighting, according to qualifications and experience.

Further particulars may be obtained from the Registrar, The University, Newcastle upon Tyne NE1 7RU, to whom applications should be addressed, quoting the reference, should be lodged as soon as possible, but not later than August 15, 1980. Please quote reference THES.

SALFORD
THE UNIVERSITY OF
DEPARTMENT OF MATHEMATICS
LECTURER IN COMPUTER SCIENCE

Applications are invited from persons with relevant postgraduate qualifications or industrial experience for the above post, tenable from October 1, 1980.

Emphasis is to be placed on the teaching of Applications Software, including Computer Graphics, Database Systems, Simulation and Operations Research.

Salary scale (under review) : £5,063 to £10,464 per annum (with U.S.S.). Appointment will normally be made within the first six points of the Lecturer scale.

Further particulars may be obtained from the Registrar, The New University of Ulster, Coleraine, Co. Londonderry, Northern Ireland BT52 1SA, quoting reference 80/63, to whom applications, including a curriculum vitae and the names and addresses of three referees should be sent not later than August 18, 1980.

WARWICK
THE UNIVERSITY
HALF-TIME LECTURESHIPS IN APPLIED SOCIAL STUDIES

Applications are invited for two Half-Time Lectureships in Applied Social Studies, tenable from October 1, 1980. Together the successful candidates will be required to teach undergraduates and postgraduates in social science in three or four of the following areas, at present from a comparative perspective :

Education : Personal Social Services
Health : Mental Health
Family and Demographic Change
Unemployment
Planning and Urban Issues

It is hoped that at least one of the candidates will have first-hand experience of practice in the welfare fields and an ability to contribute to the development of current studies. The candidates should be interested in teaching social theory and ideology with a critical orientation of current studies on organizing and policy in the welfare field, and to relating theory and practice through fieldwork, research, consultancy and action. Salary pro-rata to that for the Lecturer scale : £5,063 to £10,464 (under review) for another funded vacancy.

Applications (four copies) should be sent to the Registrar, University of Warwick, Coventry, CV4 7AL, quoting reference number 57/80.

Closing date for receipt of applications is August 29, 1980.

SOUTHAMPTON
THE UNIVERSITY
CHEMISTRY DEPARTMENT
DEPARTMENT OF ADMINISTRATIVE STUDIES

Applications are invited for this key post in a large department of 150 research workers. Which will become available on 1st October, 1980. The new appointee will take the post on 1st January, 1981 or as soon as possible after that. Salary £8,427 to £10,464 per annum under review, plus USS.

The diverse responsibilities of the post require an unusually wide and adaptable man. Among the duties will be responsibility for advising on finance, budgeting, accounting and policy in the sciences field, and to relate the theory and practice through lectures, seminars, consultancy and action. Salary pro-rata with that of a lecturer and other staff.

Further particulars may be obtained from the Administrative Staffing Secretary, The University, Southampton SO9 5NH, Five copies of applications, including the names and addresses of three referees and a full curriculum vitae should be sent to the above address by noon on September 1, 1980. Please quote reference 1885.

NEWCASTLE UPON TYNE
THE UNIVERSITY OF
DEMONSTRATOR IN THE DEPARTMENT OF PSYCHOLOGY

Applications are invited for a temporary post of demonstrator in the Department of Psychology, tenable for a period of two years. Qualifications should include a first class honours degree in psychology, and preferably a postgraduate qualification. Some experience of computing would be an advantage. The successful applicant would be expected to organize and share in the running of practical classes and to undertake other tutorial teaching.

Salary will be at appropriate point on the scale for Lecturers : £5,063 to £10,464 per annum, according to age, qualifications and experience.

Further particulars may be obtained from the Senior Assistant Registrar (T.H.), The University, Kensington Terrace, Newcastle upon Tyne, NE1 7RU, with whom applications should be received, quoting the name and reference number, not later than August 15, 1980.

NOTTINGHAM
THE UNIVERSITY
LECTURER IN SPECIAL EDUCATION
(Amended Advertisement)

Applications are invited from suitably qualified persons for a post in the field of Special Education. Applicants should have relevant experience as well as appropriate qualifications.

The appointment will be made within the salary range £5,063 to £10,464, under review.

Further particulars and forms of application may be obtained from the Staff Appointments Officer, University of Nottingham, University Park, Nottingham NG7 2RD. Please quote reference TES.

ULSTER
THE NEW UNIVERSITY
SCHOOL OF BUILDING AND ENVIRONMENTAL STUDIES

Applications are invited for a full-time lecturer in Geography which is available from October 1980 or as soon after as practicable. Candidates should have a special interest in cities.

Salary scale (under review) : £5,063 to £10,464 per annum (with U.S.S.). Appointment will normally be made within the first six points of the Lecturer scale.

Further particulars may be obtained from the Registrar, The New University of Ulster, Coleraine, Co. Londonderry, Northern Ireland BT52 1SA, quoting reference 80/62, to whom applications, including a curriculum vitae and the names and addresses of three referees should be sent not later than August 18, 1980.

Polytechnics continued

Leeds POLYTECHNIC

School of Management and Business Studies

LECTURER II IN MANAGEMENT SCIENCE

Temporary One-Year Post

To teach Quantitative aspects of Management including Statistics and Operational Research on a variety of courses within the School.

Salary Scale : £4,851-£7,794.

Details from :

The Services Officer, Leeds Polytechnic, Calverley Street, Leeds LS1 3HE. Tel : 0532 462355.

Closing Date : 22 August, 1980. Please enclose s.a.e.

LEICESTER
THE POLYTECHNIC
SCHOOL OF MATHEMATICS, COMPUTING AND STATISTICS
LECTURER II SENIOR
(Post No: 69)

The Lecturer will teach groups on the appropriate courses in a variety of subjects. Applicants should have an appropriate degree with experience of industrial/commercial data processing. Encouragement will be given to those who can competently research and use computer software. Salary will be within the range £5,063 to £10,464 according to qualifications and experience. Superannuation under USS. Greater London Weighting. Five copies of applications, including the names of three referees, should be sent to the Staff Officer, Leicester Polytechnic, Beaumanor Hall, Leicester LE4 2BH, quoting the post number.

Application forms and further details may be obtained from the Staff Officer, Leicester Polytechnic, Beaumanor Hall, Leicester LE4 2BH (telephone Leicester 763500/1), quoting reference number 69.

LONDON
POLYTECHNIC OF THE SOUTH BANK
Borough Road
London SE1 0AA
HEAD OF COMPUTER SERVICES

Applications are invited for this increasingly critical post, the reorganization of the present Head. This post is at a salary commensurate only as Summer Term Head of Department, Group 1 for Number Authorities as for Senior Administrative staff.

There is an entry for 23 and any clients is fixed on a scale £[illegible] to £[illegible] (under review) and supporting special equipment.

Salary : £10,971 to £12,125 (subject to review April 1980) inclusive of Inner London Allowance).

Further particulars and application forms from the Staff Officer, Polytechnic of the South Bank, Borough Road, London SE1 0AA.

Closing date for receipt of applications is August 22, 1980.

Polytechnics continued

PLYMOUTH POLYTECHNIC

Plymouth Business School

HEAD OF DEPARTMENT OF BUSINESS STUDIES

(READVERTISEMENT)

Salary: £11,304-£12,561

(under review)

The Department is responsible for Business Studies in the Plymouth Business School, the other Department in this Faculty being Management Studies.

A range of undergraduate and professional courses are offered covering the disciplines of Accounting, Economics and Law. Postgraduate and post experience work is also on offer. Suitable candidates can also be considered for the title of Professor under procedures in the Polytechnic.

Application forms to be returned by Friday, 22nd August, 1980 can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth, Devon, PL4 8AA

LIVERPOOL POLYTECHNIC
DEPARTMENT OF MANAGEMENT STUDIES

LECTURER II/SENIOR LECTURER IN MARKETING MANAGEMENT

£4,851-£9,039 p.a.

Applicants should have an appropriate first degree and management experience in consumer marketing. A working knowledge of Export Marketing would be an advantage as would some previous lecturing experience.

PLEASE QUOTE REFERENCE LP/435

TEMPORARY LECTURER II/SENIOR (MARKETING MANAGEMENT)

£4,851-£9,039 p.a.

This is a temporary appointment from 1st September, 1980, to 1st August, 1981.
Applicants should have an appropriate first degree and management experience in consumer marketing. A working knowledge of Export Marketing would be an advantage as would some lecturing experience.
PLEASE QUOTE REFERENCE LP/436
Closing date is 14 days from the appearance of this advertisement.
Application forms and further particulars from the Personnel Office, Liverpool Polytechnic, 2 Rodney Street, Liverpool L1 2UA. Tel.: 051-708 0626, ext. 43.
Previous applicants will be automatically reconsidered.

The Polytechnic of Wales
Polithechnig Cymru
DEPARTMENT OF SOCIAL STUDIES

RESEARCH DEMONSTRATOR (WOMENS' HISTORY)

Candidates with a good honours degree in History are invited to apply for the above research post, to be based in the department's History section. The successful applicant will work with Dr. Deirdre Beddoe on a project on women's waged work in Wales c.1870-1930. He/she will be expected to register for a CNAA higher degree.
Salary: £2,017-£4,406 p.a. (under review).
For further details and application form (return by August 15) please call (tel.) the Assistant Director (Training), The Polytechnic of Wales, Treforest, Mid Glamorgan, CF37 1DL. Tel.: (0443) 405122, ext. 3011.
Closing date: 20th August, 1980.

BRISTOL
THE POLYTECHNIC
FACULTY OF ENGINEERING

LECTURER II (SENIOR LECTURER) IN MANUFACTURING

Applications are invited to apply for the above post. Applicants should have experience in manufacturing industry and a sound basic knowledge of production engineering. Salary scale £4,851-£9,039 per annum. Ref. 80/101.
Further details and application form from the Personnel Officer, Bristol Polytechnic, Frenchay Campus, Coldharbour Lane, Bristol BS16 1QY. Tel. 0272-656261 ext. 351.
Closing date for receipt of completed application forms August 15th, 1980.

LONDON
MIDDLESEX POLYTECHNIC

LECTURER IN LAW
Temporary two-year appointment

Applications are invited from candidates with good honours degrees in law and with postgraduate qualifications or experience.
Candidates should be able to offer either common law subjects and/or property law at degree level.
Appointment will be at an appropriate point on the Lecturer scale: £4,851-£9,447 p.a. inclusive.
Write for application form and further information, quoting 106 first class to: Applications Office (ref. A1108) Middlesex Polytechnic, Cat Hill, Barnet, Herts EN4 8HT.
Closing date August 14.

CITY OF LONDON
THE POLYTECHNIC

LECTURER II IN ECONOMICS

A vacancy exists for a lecturer to teach economics in the Christ's College of Commerce. Applicants should have a degree in economics, preferably with some business experience and the ability to teach business students. A post-graduate qualification or experience in teaching in an appropriate area of study.
Salary £6,150 per annum to £8,490, per annum including London Allowance of £600 per annum.
For an application form and further particulars write to the Staff Recruitment Officer, City of Londonderry Polytechnic, Foundedith, Londonderry, BT48 7JL, quoting reference 80/101.

LONDON, S.E.1
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Required for session 1980/81 to teach STATISTICS, ECONOMICS, COMPUTERS and CNAA PROJECTS to students on B.A.C. business studies and B.A.C. Diploma courses.
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Apply: Staffing Officer, South Bank Polytechnic, Borough Road, London SE1 0AA.

LEICESTER
THE POLYTECHNIC

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Applications invited from graduates and those with equivalent qualifications in computing, business and public administration for the post of COMPUTER TIMETABLING OFFICER to be responsible for the timetabling of students, staff and rooms by computer and to extend progressively the computer at present used for all schools in the college of education.
Previous relevant experience would be an advantage but specific training will be provided. The post is interesting and demanding, requiring an ability to develop a good working relationship with academic staff.
Salary: £5,268 to £6,381 per annum (increase pending).
Application form and further particulars available from Staffing Officer, Leicester Polytechnic, PO Box 143, Leicester LE1 9BH. Telephone (0533) 551551, Ext. 2504/1.
Closing date: August 30, 1980

NEWCASTLE UPON TYNE
THE POLYTECHNIC
SCHOOL OF APPLIED SOCIAL SCIENCE

TEMPORARY PART-TIME LECTURER IN SOCIAL RESEARCH METHODS & STATISTICS

Required to teach for 16 hours a week for 32 weeks between October 1, 1980 and July 3, 1981. Remuneration is at the rate of £7.60 per hour. Candidates must have research experience and show that they can teach all aspects of methodology and statistics on the sociology degree and other courses.
For further details and application form, returnable by August 18 1980, please call our 24 hour telephone answering service (0632) 321261 or send a stamped addressed envelope to the Personnel Officer, Newcastle upon Tyne Polytechnic, Ellison Building, Ellison Place, Newcastle upon Tyne NE1 8ST.

Fellowships and Studentships

SALFORD
THE UNIVERSITY
DEPARTMENT OF MATHEMATICS

RESEARCH FELLOW IN COMPUTER SCIENCE

Applicants should possess, or shortly expect to obtain, a first-class honours degree in Computer Science. Preference will be given to applicants whose research interests are related to the design and implementation of interactive systems software, interactive graphics hardware and software applications or microprocessor hardware and software applications. The fellowship is tenable for two years in the first instance.
Post tenable from October 1, 1980, or such earlier date as may be agreed. Salary on scale £5,000 to £10,483 per annum (under review from July 1st, 1980).
For further particulars and an application form please quote reference MA/LCS, to Staff Records Officer, City of London Polytechnic, 117-121 Houndsditch, London EC3A 7BU.

Colleges and Institutes of Technology

BOLTON INSTITUTE OF TECHNOLOGY
ELECTRICAL ENGINEERING DEPARTMENT

LECTURER I/LECTURER II/ SENIOR LECTURER APPOINTMENTS AND TEMPORARY (One Year) SENIOR LECTURER

(Re-advertisement)

Several vacancies have arisen in the Department.
The Department has five full-time courses in Electrical Engineering including a CNAA Degree and a City Honours Degree. It has also part-time courses organised on a Regional basis in Electrical Engineering, Electronic Engineering, Industrial Measurement and Control. Extensive short courses are organised for local industry which include an extensive programme of Microprocessor Awareness Projects supported by the Department of Industry. Research and consultancy by members of staff are encouraged.
Appointments may be made in the following subject areas:
Communications
Micro Electronics applied to Power Systems
Control Systems
The grading of posts will depend on applicants' qualifications and experience.
Salaries (under review):
Lecturer I: £4,071-£7,005
Lecturer II: £5,229-£8,436
Senior Lecturer: £7,785-£9,822
A temporary (one year) appointment is also available at Senior Lecturer level in Electrical/Electronic Science. Applicants must have graduate qualifications and relevant industrial or other relevant experience.
Application forms and further particulars are available from the principal Bolton Institute of Technology, Deane Road, Bolton, BL3 5AB, to whom completed forms should be returned by 15 August, 1980.

Colleges of Education

WESTMINSTER COLLEGE

LECTURER II IN MATHEMATICS

Applications are invited for the post of Lecturer II to take up appointment as soon as possible, and in any case not later than 1st January, 1981.
Applicants should have a good Honours degree in Mathematics. Experience in the use of a computer and/or micro processor is essential and school or college teaching experience would be an advantage.
Further details may be obtained from the Principal Secretary, Westminster College, North Hinksey, Oxford OX2 9AT, to whom applications should be sent by 15th August, 1980.

Research Posts

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We are looking for a person who is prepared to provide advice and guidance to seven Research and Development Officers and to other Barnardo staff located throughout the United Kingdom.
The Research Liaison Officer will also be expected to contribute to the production of a variety of professional publications already launched by Barnardo's.
This post is based at Barkingside, but extensive travelling throughout the United Kingdom and Eire will be involved.
Applicants should be in sympathy with the Christian principles on which Barnardo's work is based. Conditions of service broadly in line with local authorities. Transferable pension scheme. Relocation expenses.
Informal enquiries to Miss Nora Dixon, Co-ordinator Research and Development—application forms available from the Personnel Manager, Tanner Lane, Barkingside, Ilford, Essex IG6 1QG. Closing date: 14th August, 1980. Tel.: 01-550 8822.

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P.O. Box 7,
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Research Posts continued

LANCASHIRE EDUCATION COMMITTEE

Blackburn College of Technology and Design

Burnley College of Arts and Technology

with the

Cotton and Allied Textiles Industry Training Board

RESEARCH ASSISTANT

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A Research Assistant is required to work in the Blackburn and Burnley Department of Textiles in close cooperation with the Cotton and Allied Textiles ITB on a pioneering development of "distance learning" programmes.
Initially it is intended to develop distance learning for the City and Guilds 414 Textiles Techniques (Broadloom Weaving option) and subsequently to extend the development to higher-level courses.
The successful candidate, male/female, with appropriate technical background and teaching experience, or alternatively a recent degree or similar qualification in textiles, will be expected to cooperate closely with colleagues in College, industry and the ITB.
Training in preparing and writing distance learning programmes will be provided on appointment.
Contract: Three years, with possible extension.
Salary: £4,071 (under review, with two annual increments).
Conditions: National Joint Council for Local Authorities' APT and C Staff: 36½ hours per week.
Further details from: The Chief Administrative Officer, Blackburn College of Technology and Design, Blackburn, Lancashire. Telephone: Blackburn 64321.
Closing date for receipt of applications is 22nd August, 1980.

SCIENCE RESEARCH COUNCIL

CO-ORDINATOR

Interdisciplinary Research & Training

The Science Research Council, in consultation with the Social Science Research Council, is seeking a Co-ordinator for the programmes of research and post-graduate training supported by the two Councils' Joint Committee. This Committee awards grants to finance research by university and polytechnic staff, and post-graduate studentships, for programmes that blend engineering or natural science with social science.
The Co-ordinator will visit universities, polytechnics, industry and government departments in order to identify and encourage programmes suitable for the Joint Committee's support. If proposals of sufficient quality are forthcoming, the Committee's research budget is planned to reach £250,000 per year from 1982/3.
Candidates should have experience and wide contacts in industry and academic institutions, and a personal commitment to encouraging research linking technology and the social sciences.
The Councils have in mind a part-time consultancy at a rate commensurate with professional or senior management standing, but would consider flexibly other arrangements to suit the successful candidate's circumstances.
Further particulars are available from: Mrs. A. P. Roythorne, Science Research Council, Manpower Section, P.O. Box 15, North Star Avenue, Swindon, Wilts. (Tel: 0793 26222, Ext. 2192), to whom applications should be returned by 22 August, 1980.

SRC

THE OPEN UNIVERSITY
FACULTY OF SCIENCE

RESEARCH ASSISTANT IN CHEMISTRY

Applications are invited for the post of Research Assistant in the Chemistry Discipline at the Open University. The successful applicant will work with Dr. C. J. Hawkins (Open University) in collaboration with Professor Alan Maccoll (Emeritus Professor of Chemistry of University College, London), on a project which will examine the mechanism of the pre-phase decomposition of azo-compounds by kinetic methods, including kinetic isotope effects.
Candidates should hold a PhD in Chemistry. It may be possible for the successful candidate to register for a higher degree.
This post is available for two years in the first instance in the Range 1A scale, starting salary will be at the lower point of the 1A scale £4,403 to £6,325 per annum.
Application forms and further particulars are available from the Assistant Registrar (Ref. A2107), Faculty of Science, The Open University, Walton Hall, Milton Keynes, MK7 6AA. Telephone enquiries: there is a 24 hour answering service on (0908) 74066.

OXFORD
S.S.R.C. CENTRE FOR SOCIO-LEGAL STUDIES
WOLFSON COLLEGE

RESEARCH OFFICERSHIP IN SOCIOLOGY

Applications for a RESEARCH OFFICERSHIP in SOCIOLOGY are invited from graduates willing to develop research involving collaboration between lawyers and social scientists. The person appointed will be expected to work in the area covered by the centre's programme on procedures for adjudication and disputes settlement (particularly in the transcription and analysis of use recorded data from legal settings). Preference will be given to candidates with qualifications and experience in empirical research.
The appointment will be for three years and the salary will be within Range 1B/1A of the National Salary Scales for Research Staff (at present £4,403 to £8,769 per annum).
Application forms and further particulars may be obtained from the Directors, S.S.R.C. Centre for Socio-Legal Studies, Wolfson College, Oxford OX2 6UD to and applications, including the names of three referees, should be sent by August 31st.

BRADFORD
THE UNIVERSITY

RESEARCH ASSISTANTSHIP IN CHEMICAL ENGINEERING

Applications are invited for the above two or three-year research post to study roll coating processes. The work will be carried out in collaboration with several industrial organisations. Candidates should have at least an upper second-class honours degree in a branch of Engineering or Science; some knowledge of polymer processing would be an advantage.
Salary within the range £4,403 to £8,769 per annum. Superannuable.
Further particulars and application forms (to be returned as soon as possible) obtainable from the Registrar (Post Ref. Ch/RA/PCD/RA), University of Bradford, West Yorkshire BD7 1DP.

ASTON IN BIRMINGHAM
THE UNIVERSITY
FACULTY OF SOCIAL SCIENCES AND HUMANITIES

RESEARCH ASSISTANT

Pilot project on screening of pre-school children for learning and language disorders.
Applications are invited from graduates in education, psychology or speech therapy for appointment as a RESEARCH ASSISTANT for a period of 18 months.
Preference will be given to candidates with experience of working with young children, psychometrics or in the area of special education and pre-school provision.
Salary in the range £4,403 to £6,369 per annum.
Application forms and further details may be obtained from the Staff Officer (quoting Ref. No. 457/75c), University of Aston in Birmingham, Gosta Green, Birmingham B4 7ET (Tel. 021-359 3611 Ext. 2031).
Closing date for the receipt of applications is September 8, 1980.

BRISTOL
THE UNIVERSITY
DEPARTMENT OF CHILD HEALTH

EDUCATIONAL RESEARCH OFFICER

An EDUCATIONAL RESEARCH OFFICER is required to join a multi-disciplinary team working on a national survey of the educational progress, health and development of 10-year-old children. The Research Officer will be a member of a longitudinal team responsible for the analysis of the national educational data. Applicants should have experience in educational research with appropriate qualifications in an educational discipline. Other research experience, eg., psychology, would be an advantage. The post is tenable for 2½ years in the first instance.
Salary within Range 1A, £5,705 per annum to £7,077 per annum (scale under review).
Applications to Professor Neville Butler, Child Health Research Unit, 55 St. Michael's Hill, Bristol BS2 8BJ.

LIVERPOOL
THE UNIVERSITY
RESEARCH ASSISTANT IN PUBLIC POLICY

Applications are invited for the post of University Research Assistant/University Senior Research Assistant in the Department of Political Theory and Institutions. Applications will be welcome from well-qualified specialists in any social science discipline who have expertise which is relevant to the study of public policy. The appointment will be made for one year, renewable for a further year.
The initial salary will be on the scale £4,403 to £6,369 per annum.
Applications, together with the names of three referees, should be received not later than August 25, 1980, by The Registrar, The University, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref. 187/908/TIES.

OXFORD
THE UNIVERSITY
NUFFIELD COLLEGE

RESEARCH ASSISTANT

Applications are invited for the post of research assistant for the SSRC-funded project on "Young People and Dignity of Work" directed by Dr Gareth M. Bradshaw.
The project, two years in duration and commencing in October 1980, will investigate the consequences of youth unemployment, effects of Youth Opportunity Programme, and the experiences of young women at work.
Applicants must have a sound knowledge of social psychology and considerable interest in the problems of youth employment. The work could be full or part-time and the salary will be at the first point on the research assistant scale (£4,403).
Further details from and applications to: Dr. Brookwell, Nuffield College, Oxford OX1 1NF. Applications should be made within 14 days of the appearance of this advertisement.

UMIST
DEPARTMENT OF MECHANICAL ENGINEERING

RESEARCH ASSISTANT

Ref: ME/334/CJ. A vacancy exists for a research assistant to undertake fundamental experimental and theoretical research into the turbulent mixing of fluids of different densities. The appointee must have a strong sense of numerical closures and of numerical solution schemes for non-linear partial differential equations. Preference will be given to candidates with practical experience in engineering design and a basic knowledge of electronics and modern experimental techniques in fluid mechanics.
Salary will be on the scale £4,403 to £6,369 per annum.
Requests for application forms, quoting the above reference, should be addressed to the Registrar, Room B6, UMIST, P.O. Box 88, Manchester M60 1QD.
The closing date is August 11, 1980.

Colleges of Further Education

GWYNEDD
NORMAL COLLEGE

LECTURER IN THREE DIMENSIONAL DESIGN

(Design Craft and Technology)

Applications are invited from graduates having extensive special experience in the teaching of DESIGN CRAFT and TECHNOLOGY to lecture on specialist and general courses in honours degree level. Candidates should possess a high level of personal skill and creative ability together with an interest in the development of Design Craft and Technology within the curriculum.
The ability to lecture through the medium of Welsh is desirable and the successful candidate would be required to commence duties as soon as possible in the 1980-81 session.
Further particulars and forms of application may be obtained from the Principal, Normal College, Bangor, Gwynedd, to whom they should be returned by July 31.

Holidays and Accommodation

ARCHAEOLOGY IN ISRAEL. Digging expeditions. A holiday with a difference. From £214. Send s.a.e. to: Dept. H., Project, 67-74 Street, Russell St., W.C.1. 01-636 1262.

Overseas

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LAUNCESTON—TASMANIA—AUSTRALIA

Applications are invited for appointment to the following position:

HEAD OF SCHOOL OF SOCIAL WORK

Ref No. 13286

The appointee will be a professionally qualified Social Worker who has achieved status in social work, education, administration or research and who has a recognized commitment to the education of social work professionals. In addition to teaching duties and course development, the Head will be required to consult with appropriate advisory and professional bodies.
The school currently offers a four-year programme leading to the award of Bachelor of Arts in Social Work. Approval has been obtained for a post-graduate diploma in social work administration to commence as soon as is practicable.

HEAD OF SCHOOL OF ENVIRONMENTAL DESIGN

Ref No. 13380

The appointee will be responsible both academically and administratively for the school which, while based in Launceston, will also have a significant teaching and field role in Hobart.
The school offers a two-day programme composed of a three-year degree in Environmental Design, followed by part-time professionally based post-graduate diplomas in architecture, building operations, urban planning and landscape planning.
Applicants should hold appropriate academic and professional qualifications and, preferably, have had professional experience in at least two of the fields stated above.
The academic structure of the college is currently under review and preliminary proposals, if adopted, allow for the formation of faculties. Under the proposed structure, heads of faculties will be appointed from heads of schools. The appointee to this position will be eligible for such higher appointment.
ENQUIRIES of an academic/professional nature should be directed to the Principal of the College, Dr. C. A. O'Flaherty, telephone (003) 26 0531.

SCHOOL OF BUSINESS AND ADMINISTRATION

PRINCIPAL LECTURER III

Ref. No. 13480

The school is a rapidly growing section of the college, responsible to degree and diploma courses in accounting, business administration, data processing, public administration, personnel management, small business management and agricultural business management.
The successful applicant will be expected to have a high level of expertise in one or more of the following disciplines:
Accounting, Commercial Law, Economics, Organizational Behaviour, Personnel Management and Industrial Relations, Small Business.
Significant professional experience would be highly regarded. Applicants should also have a level of academic attainment commensurate with the senior status of the position.
ENQUIRIES of an academic/professional nature should be directed to the Head of School, Dr. David Beck, phone (003) 26 0218.

SALARIES:
HEAD, LEVEL III, $A33,211 per annum.
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PRINCIPAL LECTURER III, $A27,853 per annum.
Level of appointment/commencing salary will be determined according to qualifications and experience.
Further information and application forms are available from the Personnel Officer.
Applications quoting appropriate reference number and including the names and addresses of three referees, should be forwarded to:
The Personnel Officer,
TASMANIAN COLLEGE OF ADVANCED EDUCATION,
P.O. Box 1214,
Launceston Tas 7250 Australia.
Closing Date: 29 August, 1980.

Sociologist

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Candidates should have a university degree in sociology or socio-anthropology and postgraduate qualifications in a related field. In addition, they should have at least five years' broad-based experience of rural societies in the Third World. A close knowledge of herding societies would be particularly useful.
Interested applicants should be of British nationality and should apply with detailed cv to:
Owen Davies,
Personnel Adviser,
Booker Agriculture International Ltd.,
Bloomsbury House,
74/77 Great Russell Street,
London
WC1B 3DF.

BOOKER AGRICULTURE INTERNATIONAL

Overseas continued

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Post Graduate and Post Doctorate Physical Scientists are invited to apply for research posts in the following areas:
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Application forms, available from the Personnel Office, The National Institute for Higher Education, Limerick, Ireland should be completed and returned by 20 August 1980

Administration

UNIVERSITY OF EDINBURGH

POST OF

FINANCE OFFICER

Applications are invited for the post of Finance Officer, to succeed Mr. R. D. Currie, (University Accountant), who retires on 30th September, 1980.

The Finance Officer will be a member of the senior administrative team called upon to advise on general policy matters in the University. He will be responsible to the Secretary to the University but will have close day-to-day contact with the Principal and Vice-Chancellor.

While the possession of an accountancy qualification would be an advantage, it is not deemed essential. Preference will be given to candidates with previous experience in University administration.

The salary will be on the Administrative Grade IV Salary Scale, together with superannuation benefits.

Further particulars may be obtained from the undersigned, with whom applications (10 copies) giving the names of three referees, should be lodged not later than 8th September, 1980.

Please quote reference 10/80.

BIRMINGHAM
THE UNIVERSITY
PROCLINICAL CURRICULUM

Applications are invited for the post of Senior Clinical Biochemist (Grade 9) in the Department of Biochemistry and Pre-clinical Medical Science for a curriculum time-tabling and examination arrangements and the maintenance of student records. There will also be some teaching involved in medical biochemistry. Applicants should have a good general education and administrative experience, required proficiency in an academic position, ability to deal with academic and administrative staff and students important.

Salary from £4,000 to £7,340 (under review) with superannuation benefits.

For further details and application form (quote ref. 2/2/80) to the Assistant Secretary, University of Birmingham, P.O. Box 363, Birmingham, B15 2TT.

Closing date: August 28, 1980.

LONDON
THE UNIVERSITY
St. THOMAS'S HOSPITAL MEDICAL SCHOOL
ADMINISTRATIVE OFFICER

Applications are invited for the post of Administrative Officer (A.O.) in the Medical Records Department. Salary on Administrative Officer Scale £6,000 - £7,740 (under review) plus London Weighting and superannuation. Applicants should have University experience and ability.

Application form and further particulars from the Registrar, Guy's Hospital, London Bridge, London, SE1 9RT.

All advertisements are subject to the conditions of acceptance of Times Newspapers Ltd., copies of which are available on request.

Courses

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Opportunities exist for graduates who may wish to undertake research related to this study with a view to registration for a CNAA higher degree.

Further details can be obtained from Mrs. M. Wheeler, School for Independent Study (European Research Students), Ref AD142, North-East London Polytechnic, Holbrook House, Sandringham Rd., 01-590 7722, Extension 3214.

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Librarians

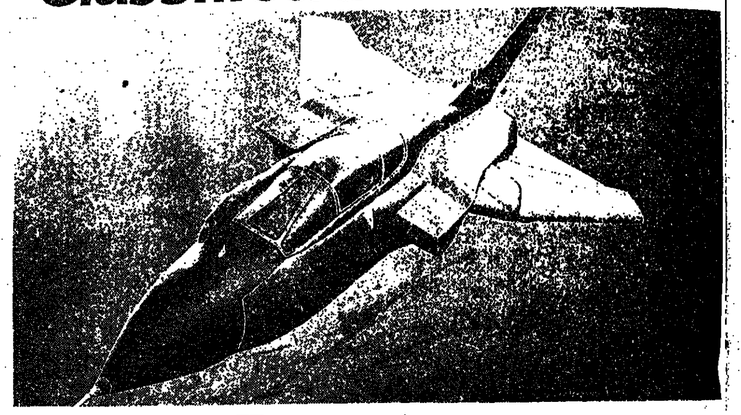
KEELE
THE UNIVERSITY
LIBRARIAN

Applications are invited for the post of University Librarian (L.A.S. Grade IV) to fill vacant post on retirement of Mr. A. J. C. Stewart on September 30, 1980.

Applications should reach the Registrar, University of Keele, Staffs., ST5 5BG, from whom further particulars may be obtained, by October 15, 1980.

General Vacancies

Classified information.



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[illegible] Officer, Department of Manpower Services, Kingsway House, Kingsway, London WC2B 6SE.

RAF officer
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BBC

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Contact Mrs. Terry Davies, Secretary to the Director, EBS, 23 Goswell Road, London, E.C.1. Telephone 01-251 4385.

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Union view

The call which no one wants to utter

Technically speaking, redundancy and premature retirement are quite separate matters. It is the convention for unions to object very strongly to the former while approving of the latter. Yet the raison d'etre of the procedures is, in each case, to reduce the number of employees and thereby to cut expenditure. Ironically, a position has arisen where calls for volunteers for premature retirement are almost welcomed while calls for volunteers for redundancy dare hardly be breathed for fear of provoking an unfavourable reaction.

In 1976, CLEA and some of the other teachers' unions agreed that, where redundancies as defined in the Redundancy Payments Act 1965 are contemplated, the authority will rather seek volunteers for premature retirement by reason of redundancy. However, when it comes to implementing this, teachers unwittingly find themselves ineligible for the redundancy payment due under the very Act quoted in the agreement! In a recent case, Fail-v-Northumberland County Council, the court upheld that a redundant head teacher should not receive a redundancy payment partly because he was given premature retirement not "by reason of redundancy" but "in the efficient discharge of the education service". A lump sum of up to £3,600 can thereby be forfeited. In those cases where staff are being prematurely retired and there is an incentive for local authorities to implement premature retirement rather than redundancy. The agreed redundancy procedures, quite rightly, insist upon at least 12 months' notice for the lecturer, whereas immediate retirements can be claimed to create immediate economies. It may be that there could be a mutual advantage in providing for immediate redundancy if this were coupled with premature retirement provisions.

Another of the provisions of the redundancy procedures which requires reconsideration, where it is applied, is the clause "allowing" redundant teachers to be seconded on full pay for a period of up to 12 months to undertake training or retraining in order to equip them for other branches of teaching. In the current climate it would be much more relevant if lecturers

in higher education were retrained to enable them to return to their professions outside teaching.

There was a time when whispers of redundancy would send shivers along the corridors of polytechnics and other colleges. However, with the "Crombie" compensation seen to be paid to lecturers leaving colleges of education, others in higher education have been lulled into a feeling of security, a sense that, when the chips are down, our good lords and masters will ensure that we are all right.

It is true that there is legislation which will permit the other teachers and lecturers, in the event of redundancy, to draw a pension and lump sum as early as age 50. It is true that draft regulations would allow enhancement of this pension at the discretion of the local authority.

The reason why some teachers, particularly those in the former colleges of education, were, and are, treated so much more favourably than the rest inspite of being employed by the same employer(s) to perform a similar dedicated and useful job, lies in the relation to the Secretary of State. If the Secretary of State gives directions for the discontinuation of any course for the training of teachers, then this constitutes an application of a statute and, as such, "Crombie" compensation is relevant. (It is well known that the real cause is a fall in the birth rate but the fiction remains.) If a fall in the birth rate causes a fall in the demand for primary school teachers and, later, for lecturers in higher education, that is regarded as an act of God and not a consequence of direction by the Secretary of State. Similarly the effect of application of SSR guidelines does not amount to direction. So the rest of us must forget "Crombie". A brief comparison of the differences between the proposed teachers' scheme and "Crombie" is enlightening: "Crombie applies at age 40, gives an enhanced redundancy payment, large compensation pension, and is later followed by retirement pension and lump sum for which full enhancement is automatic and can be up to 15 years; the proposed scheme applies at age 50, gives no enhancement of redundancy payment, and enhancement of pension and lump sum can be up to 10 years and then only at the discretion of the LEA.

Finally the Alice in Wonderland situation comes a full circle. Even if a teacher is declared redundant in such a manner as to entitle him to the redundancy under the Employment Protection (Consolidation) Act 1978 then there is a claw-back. Because the retirement lump sum is received immediately under the premature retirement arrangements the enhanced part of this is deemed to constitute part of the statutory redundancy payment! And all that is in addition to the fact that some local authorities are declining even to give the full enhancement possible within a very inferior scheme.

Peter Koch

The author is secretary of the superannuation panel of the Association of Polytechnic Teachers.

The hidden cost of official status

Christopher Price

It is fashionable these days to describe UNESCO as an expensive and increasingly inefficient international bureaucracy; and of course there is a great deal to be said for this view. I have always felt at international gatherings of this kind (as I did in the European Parliament) that the standard introductory welcome—"chers collègues"—has point in more senses than one. These jamborees of jetted-in folk do not come cheap. So one of my siren voices is always plugging away at me to ignore such bodies, squeeze their money where possible and leave them to their habitues who find them so fascinating.

But it never happens that way for long. Two years ago UNESCO became the arena for a spate of Israel-bashing (centred round the issue of whether it was truly European or Asian); now they are deep into "communications", and because of the collective guilt which this issue arouses amongst the rulers of the East and West, and because the third world is the exploited of the democratic pretensions of the West and is of the social ones of the Soviet Bloc, the whole question has now become an international cause célèbre and left to an Irishman to sort out. (UN organizations, being devoted to equivocal, silver tongued Babel, are tailor-made for those wandering Irish whom Dublin cannot contain.)

The Irishman in question is Sean McBride and his *Study of Communications Problems* is shortly to be discussed in UNESCO. Like all such reports, it is long, turgid and platitudinous, goes far wider than the press, radio and television, and reflects the cultural attitudes and linguistic structure of the 15 other members of the McBride Commission. (There was no British member.) But freedom of speech is what it is really all about; and anyone reading the couple of major reservations by Mr Sergei Losev—the Russian member of the commission—could be forgiven for concluding that there was precious little communication between him at least and the other members. To the unequivocal statement: "Censorship or arbitrary control of information should be abolished", he riposates: "This whole problem of censorship or arbitrary control of information is within the national legislation of each country and is to be solved within the national legal framework taking in due consideration the national interests of each country".

To: "All countries should take steps to assure admittance of foreign correspondents and facilitate their collection and transmission of news . . . Free access to news sources by journalists is an indispensable requirement for accurate, faithful and balanced reporting. This necessarily involves access to unofficial, as well as official sources of information that is, access to the entire spectrum of opinion within any country", he answers: "This paragraph . . . is completely unacceptable and I object against its being included. I suggest to replace this recommendation by the following text: 'All countries should take appropriate measures to improve the conditions for foreign correspondents to carry out their professional activities in the host countries . . . with due respect to the national sovereignty and the national identity of the host country.' In other words, to the Soviet Union censorship and Newspeak are central pillars of the system, and foreigners reporting the truth are interfering in their internal affairs."

All this having been said, however, I suspect that the exercise was a useful one—partly because the gulf between the attitudes of the Soviet Union and that of all other states to objectivity and freedom of expression has been presented more starkly than ever before. It is of course true that other dictatorships exercise censorship. But none erects it into quite so refined a doctrine of national interests". On this issue, in true Poppentian fashion, their negative stance shines out with greater clarity in this report than the quasi-positive verbiage which surrounds it—perhaps clearly enough for the Third World, standing on the sidelines watching the USSR and the West slog it to realize this is the most important and fundamental difference between them.

The second reason to welcome the McBride Report is that it has given our somewhat smug newspaper and television industry some thing to think about. The McBride Commission puts it like this: "Special attention should be devoted to obstacles and restrictions which derive from the concentration of media ownership, public or private, from commercial influences on the press and broadcasting, or from private or governmental advertising." In fact the *Daily Mail* has about as much respect for the principles of objective reporting as *Pravda*.

Sean McBride wants some sort of international status for the journalist and his role to come out of all this. Most Western journalists I meet are suspicious on this score; they suspect recognition will bring rules; and that rules will cramp their style—or even land them up in jail. They prefer to merge, chameleon-like, with the background and risk the consequences if they are found out. I suspect the whole tale has a moral for academics. Eschew status, owe your highest loyalty to truth and objectivity as you see it and watch like a hawk for any rules your government or any other tries to impose on you.

My one major gripe about UNESCO applies equally to the world of academe. If only, like the BBC and the popular press, they had a remit to entertain, as well as to inform and educate, the proper, relentless pursuit of truth, might be just a bit more fun. But I suppose that would be asking too much.

Don's diary

Sunday

I went to church with my family. There was a very long prayer about the ever-increasing gloom of the ever-lengthening dole queue. No doubt about it the nonconformists have a social conscience. Unfortunately I did not feel uplifted. At Sunday School my daughter had the story of Joseph being thrown into the pit by his brothers. When we returned home, for lunch, I heard Sir Keith on Radio 4. He was informing me of my self-inflicted unemployment. I was very impressed with his suggestion that I offer my services at less than the going rate. I spent the rest of the afternoon trying to draft letters to education officers, principals and other barons of education indicating my desire to do my bit for employment, Sir Keith and The Nation. Whatever Burnham, Clegg et al dictate I will work for less. (I am no longer a member of a professional association. As an economy I cancelled all my standing orders, so I became "overdue." and was duly "struck off".)

Monday

Perhaps Sir Keith is right. There is money in unemployment, if one goes about it in the right way. The local evening paper has jumped on to the bandwagon of the weekend and decided that unemployment is news, so the editor has finally decided to publish an article on the rigours of unemployment which I wrote two months ago. To give the piece added verisimilitude, he sent a staff photographer to my home with the first edition of his paper. So, looking suitably *harassed, woebegone and dismal*, I poured out my tears over the classified section and was photographed. Payment will follow in six weeks time. That will cause havoc with the Department of Employment. I expect it would prefer me not to declare it. Out of spite to bureaucracy I will, I do not want Reg Prentice's hounds sniffing at my doorstep. I wrote the article in May was photographed in June will be paid in August so which day do I declare it worked? "Tricky, very tricky", that is what the clerk will say. "I'll have to refer to my supervisor."

Tuesday

Still scanning the national and local newspapers for job news. I even re-sorted to last Friday's *THES, TES, TLS* just in case I'd missed out on anything. Still no post for me this week and only three applications in the pipeline and no interviews in prospect. Things are bleak. In March a careers guidance consultant told me that I might have to sit back and wait until September. What is so magic about September? I've been registered with the Professional and Executive Register for getting on for a year, but I've not received one suggestion from them. I'm difficult to place. They were very frank and very gentle when they virtually told me that they couldn't help me. I could be retrained. Teachers and education administrators are not very good for anything useful but they are good as training material. I got out the material on retraining. Now that I've been without a job for six months I might get on a course. Although cutbacks mean that there are not many courses left.

Wednesday

Ventured out into the garden to do some weeding. I'm trying to behave normally, so the garden is still overgrown. Unfortunately the neighbour caught sight of me. I expect she'll tell her husband (that I was sunbathing all morning, at the expense of the taxpayer. I beat a hasty retreat on account of a heavy shower of rain. Today was the deadline for an invitation to interview for one job I've applied for. No news is bad news. Jobs in pipeline down to two. I begin to look forward to Friday's edition of *THES*, etc. In the evening I check that my dole queue record card is out. It's my big day of the fortnight tomorrow.

Thursday

9.30 am prompt I signed on. The queue is getting very long. I had to queue for an hour. School leavers (you can tell them by their youth and the way in which they fold their record cards into twenty-four and nibble the corners) and students (they ostentatiously read "*A la Recherche du Temps Perdu*" and other works, aloud) are helping to contribute to the success of the efforts of "the minister for unemployment". There is one old chap in the queue who signs on at the same time as me who is always very cheerful. He, lucky fellow, opted for early retirement from a local comprehensive and he is entitled to the dole for a whole year. He reads *The Telegraph* quietly. He is very tanned. All the gardening he has been doing, he says. The chap immediately in front of me was not so happy. It is only his second week of unemployment. Never been on the dole before, he says. He got really worked up when the girl refused to give him milk tokens. She had made a mistake, but he was so embarrassed by having to ask for them that he became extraordinarily angry. It upset the whole queue. Most times you can hear a pin drop. There is no noise at all except for the slow shuffle of feet up to the desk and the squeak of the pen along a dotted line. I mentioned the impending publication of my article to the clerk. She said: "Oh I don't know about that. I'll have to ask the supervisor", and went off for five minutes. I felt very guilty because Section 15 is a special inquiries desk. I ought to have reported my "work" there, instead of holding up the "signers". When she came back she told me to wait until I received payment and report again. (The classic Civil Service formula: decide not to decide until tomorrow.)

Friday

My article appeared in the evening paper, along with a very startled looking photograph. I'm really branded now. Still I am doing my best for Sir Keith. I devoured the *THES, TES* and *TLS* this morning. Not an awful lot of hope. One possible and two highly improbables. There were dire warning from the annual conference of the Association for Adult and Continuing Education. The prospective Labour MP for Penrith was criticising Neil Kinnock for his hypocrisy. Adult education is doomed, even Labour politicians agree on that. I wondered whether I would be allowed to do the gardening tomorrow. Is Saturday a day off for social security scroungers? I mused.

Saturday

Just after breakfast I started to mow the lawn. Unfortunately the postman caught me in the garden. He handed over my giro cheque. I could see in his friendly eyes the generous thought that he had got out of bed, early, to bring me my dole money first class delivery. We had a short chat. He concluded "That's the trouble with all these clever people, all the qualifications, but doesn't get on in job, does it?" Was he getting at me, I wondered.

Paul Thomas

The author has worked in a variety of experimental adult education projects and is now unemployed.

Laurie Taylor

"Darling, do you think E. P. Thompson could be right?"

"*What's that my love?*"

"Sorry, were you asleep?"

"*No, no. Just wondering if we'd got enough of those damned travellers cheques*".

"We've got £300 worth".

"*Yes, but really we can't risk another year like last year. All that dashing around Florence in the last week, half starved and looking for American Express restaurants. Anyway, what were you saying?*"

"E. P. Thompson, my love. I was wondering if you thought he was right?".

"*What about. The working class? Bit romantic I always thought. All that business about the Luddites as proto-revolutionaries. Mind you, jolly good book. Needed saying*".

"No, no. His latest stuff. You know about Cruise missiles and disarmament and how we've got to get out and protest about it all".

"*Oh that. Well, of course, its nothing new, you know. We were saying much the same thing 20 years ago*".

"When you were in CND?"

"*Not just CND. That was only at the beginning. The old Aldermaston bit. No, no we're well to the left of all that Canon Collins nonsense. Committee of 100.*"

"Bertrand Russell?"

"*Exactly. Got arrested with him. Absolutely charismatic. Don't you remember me telling you. We were on the steps of the Ministry of Defence and I was sitting practically next to him and that American, Ralph somebody or other, when they started dragging us away. Five pounds for obstruction. Some old magistrate called Lawrence Dunne chuntering on about not having anarchy on the streets.*"

"Well according to the *New Statesman* it all started up again. Just like it was. So exciting. Did you read it?"

"*No, can't say I did. You know what I think of the Statesman since they started messing around with the books pages. Never been the same since V. S. Pritchett. By the way, don't forget to cancel it. Can't imagine anything worse than flying back to the middle of the night from Pisa and finding four out-of-date New Statesmans on the mat.*"

"It says: "More than 2,000 people poured into Central Hall Westminster for the first major rally of the European Nuclear Disarmament and emptied £2,400 into plastic buckets to support the campaign".

"*Well we had 100,000 on some of our really big marches. Took over London. Stopped the traffic. Nothing like that nowadays.*"

"But shouldn't we think about doing something. I mean it won't ever get as big as that unless a lot of people like us decide to join in?

"*Well I'm thought about it, but quite honestly—and I'm not just getting sleep in my old age—it's all a bit different these days. That man Thompson, for example.*"

"You've not just against him leaving you read this Peter Jenkins piece in *The Guardian*?"

"*No, no. Stopped taking any notice of that old bore years ago. No, no. But there is something a little fishy about Thompson himself.*"

"Fishy? Why. What's wrong with trying to save the world from being plunged into the mindless horror of a thermo nuclear holocaust?"

"*Well, yes. That's all very well. But quite honestly whatever his intentions, and I'm sure they're perfectly honourable, I can't help having some slight doubts about anyone in this day and age who actually goes and uses up a safe universite chair. Makes you wonder a bit. Anyway, sleep well darling*".

"And you my love".

LETTERS TO THE EDITOR

The costs of London's medical schools

Sir,—The table given by Professors Baker and Born (*THES*, July 4) purports to show the university costs per annum per FTE of students at the Royal Free as £5,757, and those of King's College Hospital Medical School as £2,831. Your correspondent, Jan Garnier (*THES* July 11), suggests therefore that two doctors could be educated at Kings for the price of one at the Royal Free, and furthermore the Baker/Born table shows that students at King's are, by the criteria chosen, academically better being at the top of the table, whereas those at the Royal Free are third from the bottom.

I will abjure from arguments on the relative academic merit of students, since I do not have the data on which the figures were based, but I suspect that at least they might prove to be arguable.

The short answer to Miss Garnier's simple financial question is "No". You cannot have half-price students at King's. Over and above these university costs which have been culled from Appendix 6 of the Flowers report, a rich vein which is, not surprisingly, mined by those who feel they can obtain political advantage from it, there is a thing called SIFT or Special Increment for Teaching, which presently stands at £13,000 per annum per clinical student, and is paid to teaching hospitals in London. If one now adds £13,000 for each clinical year to the Appendix 6 Flowers Report table, the ratios between the schools ceases to be quite so dramatic. It is however worth looking more closely at Flowers Appendix 6, since it demonstrates some very odd characteristics.

Taking first the costs of medical sciences in the multi-faculty institutions, i.e., the first two years at King's and at University College, they are given as £1,767 and £5,691 per annum respectively, based on estimates that 12 per cent of the Court grant to King's relates to medical science studies and 17 per cent of the Court grant to University College similarly relates. The ratio of these two figures where one is comparing like with like, provided the administrators have done their job properly, is an astonishing 3.22 and the conclusion is quite inescapable, and I wonder that Professors Baker and Born have not drawn it, that University College Medical Science Department should immediately be closed on the grounds of excessive costs. Appendix 6 then goes on to give the figures which are quoted by Professors Baker/Born including £5,757 at RFHSM, £5,812 at St. George's, and £5,271 at Charing Cross. The figures given for UCHMS and KCHMS in the *THES* letter of July 4 have been obtained from Appendix 6 Flowers, by averaging two years' pre-clinical and three years' clinical costs, giving £4,738 at UCHMS and £2,831 at KCHMS.

I have already written (*The Times*, March 15), to point out that very large sums are requested from this medical school by the hospital for management costs, that is, heating, lighting, repairs, labour charges etc. for the accommodation which the medical school, including the clinical departments, occupies in the hospital complex, amounting to a little over 21 per cent of the total floor area. In 1978-79 something over a million pounds was paid from university funds to the hospital, which when divided by the number of undergraduate students gives about £2,180 per FTE per annum.

None of this money is expended to teach a single fact to a student unless you consider keeping him warm and paying a subsidy on his food is part of the educational process. You will not be surprised to know that the current claims made by the hospital are being inflated by the customary figures and for 1980-81 first estimates have reached nearly 30 per cent of the total medical school budget. Needless to say, if one attempts to compare these costs with those which existed in our old university buildings in Bloomsbury, then they appear on a square footage basis to be inflated by about a factor of three, although it is fair to say that the standards of heating, lighting but certainly not of maintenance are very much greater than at Hunter Street.

The situation at Charing Cross and St. George's, where the medical schools also occupy recently built accommodation integral with large hospitals is similar.

What is to be done? Hospitals are not universities; they run on a 24-hour basis, staff are employed on shifts, by and large they are overheated, and most people would agree that the needs of patients come first and those of universities come last. Furthermore everyone knows they are unionised from top to bottom and I think that no one will feel that this does anything to reduce costs.

All is not entirely black, and it is possible that this medical school will be able to renegotiate these very high costs. It is, however, very much in the interests of the party who is in receipt of these large sums to maintain the status quo and so far six months have gone by with as far as I am aware little answer to our requests for renegotiation.

I hope that this long letter puts into perspective some of the reasons why the simple cost figures culled from "Flowers" seem so very odd, and may also discourage those from pointing the finger of scorn at the unfortunates like ourselves who are in the top league of costs. Would you suggest that the hospital now be pulled down and be replaced by a series of cheaper to run cottage hospitals? Are there any sensible suggestions which can be put forward to help the present difficult situation?

My own view is that complete separation of school from hospital costs must be achieved wherever possible by installation of separate meters, steam meters and so on, giving true costs for areas occupied by the medical school, and that pro rata cost figures based on the fraction of the total hospital costs which can be attributed to the school, calculated on area, volume, or any other way, must inevitably produce astronomically high cost figures when compared with normal university costs. Hospitals are not universities and it is not helpful to anyone to imagine that they are.

Yours sincerely,

PROFESSOR H. A. B. SIMONS,
Professor of physics as applied to medicine, Royal Free Hospital Medical School.

Much more could be said on the vulnerable position which temporary posts place the occupants in, and the constant pressure to please and impress the departments (especially their heads) in receiving that an unenthusiastic reference would ensure the return to unemployment and prevent even the holding of yet another fixed-term post. At present one is caught between the need to establish proper conditions of research, teaching, publications, etc), the requirements of capable teaching and administration in one's current post, and the danger of staying too long in non-tenured jobs until one becomes too expensive for what few permanent posts remain.

Education is becoming more unequal, more commercial with elite values, more intimidated by government cuts and criticisms, and —arguably—less relevant to the needs of a society of increasing conflict in the 1980s. Unless universities recognise that they are just part of a broader labour market, and that to countenance the exploitation of others ultimately corrodes their morale and authority, we will see further divisions within higher education which merely *reflect* rather than *resolve* the inequalities and antagonisms of society at large.

Yours faithfully,
ROBERT L. MELLING,
Tutor in Economic History 1979-80.

Non-tenured posts

Sir,—As a member of AUT and a temporary member of staff at a southern university, I heartily agree with Laurie Sapper's comments (*THES*, July 7) on the problems of non-tenured posts in higher education. There are the familiar problems of adaptation and adjustment which every new post brings, together with the diminishing certainty of a permanent position at the end of a longer and darker tunnel than many faced in the expansive era when temporary posts operated as an informal academic apprenticeship system. A number of other points could be made to illustrate the impact of such increasing practices on staff morale.

First, by its very nature the system of fixed-term lectureships, tutorships, assistantships, etc, absolves the employing institutions and departments from any sense of long-term responsibility for their erstwhile colleagues. This is not to say that many conscientious and concerned academics do not express a real interest in the welfare of the departing staff, but the constraints imposed make my serious commitments unlikely.

Secondly, it might be argued that financial stringency is such that universities and polytechnics are better advised to defend temporary posts in the hope of establishing permanent jobs by practice. This again is unrealistic, since the cheap rates secured in many such posts *and* the undoubted advantages for permanent members of staff faced with heavier work-loads, encourages administration to *extend* the practice of temporary reappointments with younger and less expensive applicants rather than face the prospect of a tenured position.

Thirdly, it could be said that present conditions act against traditional security and promote a system similar to that in America where one is only given tenure after academic worth is "proven" in untenured jobs (sometimes referred to as the "publish or perish" syndrome). Irrespective of the implications for the quality of work produced—not to mention the quality of life for the individual involved —this might seem a fair response to market conditions. What is less fair, however, is the existence of a large number of colleagues in tenured posts in higher education who would merely watch the spectacle of unrestrained competition without any experience of conflict for survival in the arena below them. If we're to see the spread of temporary and probationary posts in higher education, this is likely to polarize and sectionalize academic life rather than engender a common response to fundamental problems.

A level questions

Sir,—As an A level examiner and formerly a school teacher, I have read with interest the recent correspondence on poor standards in French and in particular the letter from Nicole Dufaux (*THES*, July 18) on examinations.

A few years ago I became concerned at the number of increasingly shoddy questions set in A level biology papers by the board whose syllabus I taught. This led to a review of the A level biology papers set by most of the English and Welsh boards in a two-year period, and the results were published in *School Science Review*, 59 (208), 485-491, March 1978. It appeared that the boards had widely varying standards, and in one or two cases the standard of question setting was unacceptably low. At the request of the board most seriously criticized, their examiner I subjected to detailed and personal discussion of my criticism was published with the article.

Since there appears to be no systematic public appraisal of the standards of question-setting in the different boards, and since criticism is clearly needed in some cases, I proposed that a small committee of academics and teachers should publish an annual report comparing the standards of question-setting in the various boards' biology papers.

If such a report were to identify high standards as well as shortcomings, and if it were seen to be fair and balanced in its criticism, I believe it would be welcomed by the GCE teachers and the examination boards alike. It is probably neither practicable nor desirable to attempt to impose a national organization upon the boards. It would be better if the committees were set up only for subjects whose teachers felt concerned, their examiners subjected to detailed and personal discussion of their

Problems of the Ph D candidate

Sir—Mr J. Freeman of Middlesex Polytechnic makes an eloquent case for the problems of the PhD candidate (*THES*, July 25) and the anxieties of candidates are very real. However, his case is seen from only the one side of the desk and I have been on both. A supervisor often does little for a candidate in some fields, but after all, it will most be the candidate's work not the supervisor's.

I remember a gossip saying an excellent PhD thesis had been written by the supervisor. The aspiring brilliant career of the candidate proved otherwise. Then the supervisor is presented with an impossible situation where the examination is concerned. If he tells a candidate his thesis needs improvement he will be regarded as hostile to him, and the candidate can even sue anyway. If he sits in but does not examine he will be seen as not helping his candidate. After all, in London at any rate, if there is disagreement either examiner can ask for a third examiner to be appointed, and he can decide the effect. The suggestion of free automatic appeals to a large level of afforced by examiners who are by definition, less expert in the subject—or they would have been the original examiners—is out of all reaction.

Such appeals can only serve to the almost unimaginable case of some real injustice committed by two senior examiners.

A *viva* is certainly a tense occasion but surely usual, correct and civil. In some countries a doctoral thesis has to be defended in public. In the Soviet Union professors are flown in from other cities, and interested people can attend and put questions, a much more gruelling experience. Supply of copies to be referred to at the viva is an interesting thought but open to abuse as a "crib" in which the candidate can research the subject.

On the question of re-submission obviously re-typing and re-binding are a burdensome expense. If modern word-processor, however, will become more frequently available and on these machines only a text is on disc, it can be almost rearranged and edited without need for retyping, since a number with a VDU does not find material to be printed out for a reading.

Yours faithfully,
ALBERT KIRALFY,
Professor, Faculty of Laws, King's College London.

Sir,—We are some of the current postgraduates working in the School of Applied Social Studies at Bristol University, all at different stages of our research.

We read with considerable interest the letter by Michael Barker (*THES*, July 11), for reasons as a result of our general discussion while the situation arose we got together as a formal group to plan "strategies of survival" for the isolated postgraduate. We agree with the three types of isolation identified by Herbert and feel we are not immediately concerned with bringing radical changes to the format of research leading to the British doctoral thesis, we feel it is time to restructure and redefine our common situation in the hope of minimizing continuing problems.

So far our discussions are in infancy, but we are writing in order to communicate with other postgraduates who share our perception of the dominant problems of Ph.D research and perhaps to remedies and solutions of what we to put forward. At the moment we are collective is preparing a brief "fact sheet" to include information on conditions, resources, contacts and of course the SSRC.

While we recognize that our situation may well be very favourable to the initially fairly radical kinds of changes that some of us would like to see, we are very conscious that anything we do hope to achieve will be fairly "up to" to bring about.

Yours faithfully,
D. BARRIDGE,
G. BLUNDEN,
B. GROVES,
L. HARRISON,
P. SQUIRES.
School of Applied Social Studies, Bristol University.

Letters for publication should arrive on Tuesday morning of the latest. They should be as short as possible and should be written on one side of the paper only. The editor reserves the right to cut or amend them if necessary.

TIMES PAST THE TIMES
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An under-skilled Britain?

The contrast between the still buoyant demand for graduates, reported at this week's meeting of the Standing Conference of Employers of Graduates (SCOEG) at Cambridge, and the lowering prospect for employment generally with the number of those out of work fast approaching two million may appear a contradiction. It is, in fact, clear confirmation that Britain is a dangerously under-skilled society compared with her international competitors, a disparity that is an important contributor to the apparently inexorable process of industrial decline. Sadly it appears that the still healthy demand for the products of higher education is one market message that the present Government feels can legitimately be ignored—for the not very good reason that it can only be met by further public investment.

Of course, it may be that significant unemployment among graduates will inexorably follow the recreation of mass unemployment. If this happens, the present contrast will melt away leading to a rough equivalence of misery between the more educated and the less educated. Clearly in the rising flood of redundancies some graduates will be thrown out of work along with everyone else. Some more will find that their employment prospects have been dramatically curtailed by the deliberate act of Government in cutting public services.

But it is at least as likely that the broad contrast will remain, that serious shortages of skilled manpower (including graduates) will *persist* while unemployment generally continues to rise. Indeed the contrast might be even sharper if allowances are made for the philistine reluctance of much of industry, especially small firms, to employ graduates at all and for the misuse of graduates even by some larger and more enlightened employers. With the ending of full employment the job premium attached to skills and qualifications will probably increase rather than decline.

If this happens, Mrs Thatcher's recent suggestion so sensitively expressed that the Welsh (and presumably the Scots, Northern Irish, and the northern English as well) should move to find work may appear much less appropriate than the alternative suggestion yet to be made by any Government spokesman that instead they should study to improve their skills and qualifications. If an exhortatory slogan for the unemployed of the 1980s is required, "Study!" is at least as relevant as "Move!" and a great deal more humane.

However, it would be a very unpalatable slogan for the present Government with its naive obsession that the only significant obstacle to a restoration of the entrepreneurial spirit in Britain is the dead-hand of state control. To accept that structural obstacles, like a reluctance to make proper use of the highly skilled combined with actual shortages of skilled manpower, might also obstruct future economic growth, would undermine their simple view of economics and of the world.

Or is it that the Opposition appear to be too much more conscious of the urgent need to create a more skilled workforce. In the past Labour has too often regarded the expansion of higher education and, even more surprisingly, of new opportunities for under-qualified school leavers in terms of welfare statism and neglected its potential contribution to the creation of a more dynamic economy. The danger today is that Labour will slip into a Victorian-style mentality, defending all and every industry and job, so diverting scarce resources from the far more important task of improving Britain's skills infrastructure by investing in further and higher education.

The paradox today is that while the economic case for increased investment in skills will grow stronger as unemployment rises, and the slump deepens, the political case for such investment will perhaps grow more feeble. Once a developing and dynamic system of higher education was something that a nation committed to social and economic growth could not afford to be without: today it is something that can no longer be afforded. Higher education is squeezed, psychologically as well as financially, the universities a little, the polytechnics and colleges a lot. Any extension to school-leaver schemes will be regarded as a social repair job rather than as essential investment in improving human skills. The entrepreneurial potential of Model E is ignored.

Yet rising unemployment and deepening slump will expose rather than conceal the inadequate skills infrastructure in Britain today. An under-skilled Britain will find it increasingly difficult to compete in the world economy. Just as an under-educated Britain will find it increasingly difficult to build (or perhaps sustain) a harmonious and progressive society at home.

Open government—and its enemies

Within a few months of their starting work the new House of Commons Select Committee ran up against the wall of Whitehall's Sicilian style secrecy, as everyone had predicated (they would). The occasion was Mr Christopher Price's committee's investigation into overseas students' tuition fees. So it has fallen to Mr Carlisle to present the Government's brief and uncompromising defence of official secrecy. This states two principles; that the advice given by officials to ministers must always remain confidential; and that consultation between ministers and, far more importantly, between departments must similarly be confidential. The reply further suggests that if these principles of secrecy are not upheld the greater principle of collective ministerial responsibility will be undermined, although, perhaps in an effort to save public expenditure on printing and paper, the logical connexion is not included.

The Government, of course, is fully entitled to fight hard for its corner. If the revelation of official advice and of inter departmental consultation show that there is much less than full assent within Whitehall for a particular policy, the credibility of that policy will be undermined and the authority of the Government may be correspondingly reduced.

But what the Government is not entitled to do is to elevate its own self-interest in suppression into a constitutional principle. It is not necessary to go all the way with Tony Benn, Brian Sedgemore or Lord Crowther Hunt to believe that Britain suffers from too much official secrecy, not from too little.

In higher education the case for official secrecy is particularly weak (and to be fair is only rigorously insisted upon on sensitive issues like overseas students' fees). Colleges of education are not Trident missiles, nor capping the pool of secrets of the Budget. Senior officials at the DES are at least as important in the process of policy formation as transient junior ministers. Indeed to describe what they suggest as "advice" is hardly accurate: it is the taking of effective decisions from which the responsible minister can only dissent by provoking considerable turmoil within Whitehall. There is nothing wrong with this. After all, it is naive to imagine that departmental ministers can be involved in, or even aware of, all the detailed decisions taken in their names, and one may live still to protend that it is a collective decision by ministers. Nor can ministers oversee all the details of how policy is applied, although implementation can be just as important as principles. To preserve these various fictions is to obscure the origin and development of, and responsibility for, policy. Select Committees must be allowed to scrutinise the "efficient" decisions rather than the "digitified" decisions — and to do so they are entitled to receive reasonable information about the advice of officials and about interdepartmental consultation.

An opportunity to show good faith

Next Week's Commonwealth Education conference will provide an intriguing test of the Government's priorities and of Education Secretary Mr Mark Carlisle's political acumen. The need for savings in public expenditure will come into direct conflict with the stated desire for continuing good relations with the Commonwealth.

Assuming that Mr Carlisle maintains his insistence that a Commonwealth exemption from the new fees for overseas students would be too expensive to contemplate, his reception seems certain to be a hot one. Britain's traditional partners quite reasonably object to taking a back seat while the newcomers of the EEC are granted special treatment.

The anomaly is most marked where British dependencies are concerned, with students from the Virgin Islands, for example, having to pay the full overseas rate while their French neighbours are exempted as members of the EEC.

Although other countries will be subject to criticism for raising their fees for foreign students, it will be Britain, as head of the Commonwealth and host to the greatest number of students which is in the block in Colombo. Pleading poverty to nations with a per capita income a fraction of our own cannot be expected to meet with a sympathetic response, especially when higher education is considered an important key to development in the Third World.

If the Commonwealth is to mean anything, there must be some practical manifestation of the community of nations. There is also a strong argument that Britain owes a debt to its former colonies, which it tends to ignore.

It is accepted that countries must have the right to arrange their own budgets and that total exemption from the new fees for all Commonwealth students would distort the savings the Government wants to achieve. But Mr Carlisle should have some worthwhile concession to make at the conference, where a variety of mitigating proposals will be available for discussion.

The proposition to charge for student visas rather than levy discriminatory fees is initially attractive but runs the risk of handing over control traditionally in the hands of the academic institutions. The idea of a convention whereby fees for Commonwealth students would be limited to an agreed percentage above "home levels" seems more promising and could form the basis of a realistic agreement.

Britain is already cast as the villain of the piece, having cut back its aid programme and led the opposition to the Brandt report on north-south relations. If there is not to be an irreparable breach in the Commonwealth, the Government must show good faith with her partners. A concession over fees announced at the first conference would represent a first step on this road.

A question of interest or discontent

William Taylor

Emerging the other day from one of those interminable meetings at which the grisly but now familiar spectres of overseas student fees, inflation, demographic downturn and academic rationalization had all cast their chill, a neighbour commented gloomily that since last October he has spent half his time convincing staff that the problems are real, the other half in maintaining morale and direction by convincing them that all would be well in the end.

The balance is a fine one. According to some of my own colleagues the seriousness-of-the-situation theme has been overdone this session. Those who sit on several levels of committees have been getting the same message over and over again. By the end of the year, they were sick of hearing it. One kindly person did say that he would much prefer hearing warnings too often than too late, but the point remains that too many warnings do have a depressing effect.

It is dangerously easy to corrode the confidence, the orientation to the future, the hopes of better things that are essential to the operation of a successful educational institution. But for this to happen is not always just a matter of bad judgment. An emphasis on gloom and doom has much to do with the rise of interest group politics in the conduct of national, local and institutional affairs.

English society today is politicized in ways that mark it off from some other industrialized countries and from earlier periods of its own history. Political action is fashioned out of a ragbag of elements that include persuasion, argument, dissent, propaganda, negotiation, the withholding of labour, non-cooperation and demonstration. This list is not, of course, exhaustive. It leaves out regular participation in local and national elections, although it is doubtful if these feature as largely in the armoury of the political activist as once was the case.

Fortunately, not even a complete statement of current forms of political action in Britain would include terrorism, physical coercion, kidnapping or assassination, all of which can be found in other countries at a similar level of development and with pretensions to democratic political structures. We still have much for which to be thankful.

The rise of interest group politics has been greatly facilitated by the dissolution of any operative conception of the general welfare. This is partly a consequence of the ability to express views and opinions freely within a complex and economically stratified society.

Interest group politics have also been aided by higher levels of literacy; by the fact that both the economics and the technology of the mass media are geared to modes of presentation that polarize and simplify issues, personalize arguments and encourage group identification, and by the availability of means whereby groups can readily obtain a platform for their views. Anyone with access to a typewriter and photocopier is now in the publishing business.

Interest group politics find ready justification from objective evidence about the way in which other people manipulate the political process for their own purposes—the basis of a good deal of investigative journalism.

The field of political action is thus readily thought of as a "struggle"; a process of competitive negotiation and bargaining in which the object is to improve the position of one's own group in relation to that of others. This is, of course, a million miles from the ideals of equality and fraternity that feature so strongly in official ideologies. It bears a sad resemblance to entrepreneurial relationships within a free market economy.

Now each group has to establish its claim for an appropriate place at the trough not merely on the basis of want but also of need. Need is established by showing that one is badly done by in relation to: reasonable expectations generated by past experience (the historic base); other people with comparable responsibilities; and the contribution that, if better treated, one's own group might make to the achievement of particular or general objectives.

For any group actively to declare itself satisfied with its lot is to lose the right of claim on all three fronts. Social and political discourse in the age of the interest group is more likely then at other times to strengthen a trend towards gloom and doom, to stress dissatisfaction with the existing state of affairs. The individual or group who give the slightest hint of being content are risking gains already made, forfeiting a claim to consideration "in the next round" and invites attack on the grounds of privilege. The historic base must be protected and if possible improved upon. Appropriate comparables must be identified and deployed in negotiation. Recognition for the social and economic importance of one's activity must be obtained and held on to.

To overdo the optimism, put a brave face on one's problems, to grin and bear it, is rewarded by being asked to bear even more, by seeing attention and resources switched to people whose anguished cries and demands for special consideration have eventually worn down the resistance of those who dole out the rations.

It can be dangerous as in some countries the rich divert the attentions of the tax man by neglecting the cultivation of their front gardens and painting of their facades, so the self respecting interest group must ensure its spokespeople can present an appropriately black picture. Competitive advantage can only be maintained on the basis of messages of a largely negative character. Much of the content of political and social argument is thus constituted out of the relative deprivations and needs of constituencies of largely discrete interests. The old appeals to class solidarity have largely forfeited their claims to attention, although they provide useful legitimation for the claims made by particular occupational groups, sometimes at the expense of close fellows.

The ritual and rhetoric of the process are not particularly subtle. Most people soon acquire the vocabulary, the attitudes and even the body language that make for effective negotiation. Those who have at one level to arbitrate amongst the internal needs of their own units or departments or institutions, and at another fight a corner as one supplicant among many, manage somehow to adapt the style and content of their letters, memoranda and utterances accordingly.

It is by no means easy to succeed in this while maintaining personal integrity and a sense of authenticity. Yet many do so. They bemoan their fate. Of course. They also recognize the dangers of some kind of imposed consensus or appeal to a spurious general will.

Yet the continuous reference to the dark side that interest group politics requires extracts its toll. Especially, I suspect, on commitment. To live a normally sane and productive life while peddling gloom and doom demands a capacity for detachment and a separation of work and non work that sits uneasily with the more or less total commitment demanded by academe. However grim their demeanour, it is difficult to believe in the *seriousness* of some pessimists. If they really believed what they are saying they wouldn't last a week.

A good summer can play havoc with the expressions and attitudes needed for successful negotiation in the age of the interest group. Given fitfulness will keep breaking through. This year however, it looks as if the English climate is doing its best to ensure consistent behaviour.

Pucker the brow, etch in the worry lines, keep the mouth turned down, spokespersons October won't be long.